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Radian Corp., Research Triangle Park, NC

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16. ABSTRACT

The U.S. Environmental Protection Agency (EPA) has several ongoing activities that require speciated volatile organic compounds (VOC) or particulate matter (PM) profiles from several source categories. In 1980, EPA published the "Volatile Organic Compound (VOC) Species Data Manual, Second Edition," EPA-450/4-80-015, which provided VOC species profiles for some emission source categories. More recently, EPA published the "Receptor Model Source Composition Library," EPA-450/4-85-002, which contains PM species profiles for several source categories. As part of an effort to update the VOC and PM profile data bases, EPA has initiated several studies. The objective of the current study was to evaluate, revise, and update 1) the 1980 VOC Data Manual, and 2) the Source Composition Library.

The revised PM species profile data base is contained in Volume II of this document. The PM profiles were extracted from the Source Composition Library, with minor changes in format to facilitate inclusion of additional information in the profiles. A limited number of new PM profiles developed from literature review are also included in the PM data base. In addition to the PM profiles, Volume II contains profile assignments that link a profile to a source category. For categories where profile data are not available, the profile assignments are based on engineering judgment.

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Volume II
Particulate Matter Species Profiles

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FOREWORD

This report is the result of a cooperative effort between the Office of Air Quality Planning and Standards' Air Quality Management Division (AQMD) and the Office of Research and Development's Air and Energy Engineering Research Laboratory (AEERL). The overall management of the program was the responsibility of AQMD. AEERL was responsible for the development of selected VOC species profiles as well as program review.

ABSTRACT

The U. S. Environmental Protection Agency (EPA) has several ongoing activities that require speciated volatile organic compound (VOC) or particulate matter (PM) profiles from several source categories. In 1980, EPA published the "Volatile Organic Compound (VOC) Species Data Manual, Second Edition" (EPA-450/4-80-015) which provided VOC species profiles for some emission source categories. More recently, EPA published the "Receptor Model Source Composition Library" (EPA-450/4-85-002) which contains particulate matter (PM) species profiles for several source categories. As part of an effort to update the VOC and PM profile data bases, EPA has initiated several studies. The objective of the current study was to evaluate, revise, and update (1) the 1980 VOC Data Manual, and (2) the Source Composition Library.

The updated VOC species profile data base is contained in Volume I of this document. The VOC profile data base includes VOC profiles from primarily three sources: (1) the 1980 VOC Data Manual, (2) new VOC profiles developed from readily available existing data, and (3) new VOC profiles developed from original data as a result of the VOC speciation field sampling program. In addition to the VOC profiles, Volume I contains profile assignments that link a profile to a source category. For categories where profile data are not available, the profile assignments are based on engineering judgement.

The revised PM species profile data base is contained in Volume II of this document. The PM profiles were extracted from the Source Composition Library with minor changes in format to facilitate inclusion of additional information in the profiles. A limited number of new PM profiles developed from literature review are also included in the PM data base. As in the VOC profile data base, the PM data base also contains profile assignments.

VOLUME II - PARTICULATE MATTER (PM) SPECIES PROFILES

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EXECUTIVE SUMMARY

The U. S. Environmental Protection Agency (EPA) has several activities that require speciated particulate matter (PM) or volatile organic compound (VOC) profiles from several source categories. Some of these activities are preparation of air toxics and acid precipitation emission inventories, acid precipitation modeling studies, receptor modeling, and ozone strategy development. In an effort to update the available speciated VOC and PM profile data bases, EPA has initiated studies to (1) revise the "Volatile Organic Compound (VOC) Species Data Manual - Second Edition" (EPA-450/4-80-015); and (2) update the "Receptor Model Source Composition Library" (EPA-450/4-85-002). The updated VOC species profile data base is contained in Volume I of this document. This volume (Volume II) contains the revised PM species profile data base.

The objective of the current study was to revise the PM profiles in the Source Composition Library and develop new profiles based on literature search efforts. The revisions to the 125 profiles from the Source Composition Library mainly consisted of format changes, addition of new information, and addition of new information based on the data originally contained in the source profiles. Otherwise, the profiles in this document contain the same data as reported in the Source Composition Library.

Each PM profile in this document contains the following information:

Profile name
Profile number
Profile data quality
Control device identification
Reference(s)
Data source
Source Classification Code (SCC)
Mass fraction data
Species identification: species identified by Chemical Abstract System (CAS) number, species number, and species name

Composition data in weight percent for four size ranges: 0-2.5 um, 2.5-10 um, 0-10 um, and total particulate measured

Uncertainty associated with composition data for four size ranges: 0-2.5 um, 2.5-10 um, 0-10 um, and total particulate measured

Date

The new information in the profiles consist of mass fraction data; CAS numbers; composition data for the 0-10 um size range; and uncertainty associated with the 0-10 um size range.

Since the primary focus of the study was to revise the Source Composition Library, development of new PM profiles was a limited effort. Only five new profiles were developed for the combustion source category from readily available data.

In addition to the PM profiles, this document contains PM profile assignments for all SCC's and area source codes in the National Emissions Data System. Ideally, each source category would be characterized by an original PM profile. However, the number of source categories to be characterized is much greater than the available profiles. Therefore, profile assignments that involve linking a PM profile to a source category that does not have an original profile assignment are made using engineering judgement. This is especially important in applications such as emission inventory development in air toxics and acid precipitation areas and acid precipitation modeling studies.

For several SCC's, profile assignments using engineering judgement were not possible; however, in such cases, industry-specific average profiles were developed from original profiles representing other SCC's within the same industry group. These profiles are intended for use only if there is no other information available. In addition, a "zero" profile which is an overall average of all the profiles in the data base was developed. This profile is intended for use only in cases where nonzero emissions are reported for SCC's designated as having "zero" or "negligible" particulate matter emission factors.

SECTION 1
INTRODUCTION

The U. S. Environmental Protection Agency (EPA) has several ongoing activities that require speciated particulate matter (PM) and volatile organic compound (VOC) profiles from several source categories. Some of these activities include receptor modeling, preparation of acid precipitation and air toxics emission inventories, acid precipitation modeling studies, and ozone strategy development.

As part of an effort to update the available speciated VOC and PM profile data bases, EPA has initiated studies to (1) revise the "Volatile Organic Compound (VOC) Species Data Manual - Second Edition" (EPA-450/4-80-015); and (2) update the "Receptor Model Source Composition Library" (EPA-450/4-85-002). Another study in the VOC area consisted of a field sampling program where new profiles were developed based on original data for selected source categories. The VOC profiles compiled in Volume I of this document are primarily based on (1) interim document, (2) 1980 VOC Data Manual, and (3) field sampling program.

In the PM area, the objective of the current study was to revise the 125 profiles in the Source Composition Library and develop new profiles based on literature search efforts. The revisions to the profiles mainly consisted of format changes to facilitate addition of new information. Otherwise, the profiles in this document contain the same data as reported in the Source Composition Library. Composition data are reported for three size ranges in the Source Composition Library: 0-2.5 um, 2.5-10 um, and total particulate measured. In addition, uncertainties associated with composition data of each size interval are reported. The size interval 0-10 um is of particular interest in PM_{10} source apportionment studies and in modeling efforts under the National Acid Precipitation Assessment Program (NAPAP). Therefore, composition data for the 0-10 um size interval are also presented in this document. The data for the 0-10 um interval are calculated from data for the 0-2.5 um and 2.5-10 um intervals according to procedures outlined in the Source Composition Library (refer to Appendix B). Uncertainty values for the 0-10 um size range are also calculated based on the methodology discussed in the Source Composition Library (see Appendix B). This appendix also contains a procedure that may be used to estimate composition data for the 2.5-6 um and 6-10 um size intervals from data for the 2.5-10 um size interval.

In addition to the new size ranges, mass fraction data (i.e., fraction of mass of particulate emissions within a given size range) are also added to the data presented in the profiles. These data are provided for the following size intervals: 0-2.5 um, 0-6 um, and 0-10 um. About half of the mass fraction data were obtained from AP-42 (see Appendix C).

Development of new PM profiles was a limited effort. The primary focus of the study was revision of the Source Composition Library. Only five new profiles primarily in the combustion area were developed.

In the PM data base, several individual profiles were available for each of several source categories. In these cases, profiles for the same category were grouped together to form a composite profile. These profiles would be useful in applications such as acid precipitation modeling studies where national average values are desired. Individual profiles used in developing the composite profile are reported as well as the composite profile since the individual profile may be applicable in a specific situation (region, fuel, product, etc.). There are 11 such composite profiles in this document.

To provide the user/reader with guidance on the overall quality of data contained in a given profile, each profile is ranked A, B, C, D, or E, similar to the ranking scheme used in AP-42. The overall quality ratings reflect the uncertainties associated with composition data, mass fraction data, calculational procedures (associated with the 0-10 um range), and assumptions about composition of size fractions to fill data gaps. A more detailed discussion on profile data quality is contained in Section 2.

The activities where PM species profiles are applied may employ SCC's for representing point sources and the National Emissions Data System (NEDS) area source codes for representing area sources. Ideally, each source category/source code would be characterized by an appropriate PM profile. Since there are much fewer species profiles than source categories, a PM profile for one category is assigned to other categories that are judged to be similar to the source category(ies) having an original profile. This document contains PM profile assignments for all SCC's and applicable NEDS area source codes. In addition, profile assignments are provided for additional area source codes used in the NAPAP efforts. In cases where there were more than one profile (including a composite profile) characterizing a source category, profile assignments were based on the composite profile. For some source categories characterized by more than one profile, composite profiles were not developed. These profiles represented data based on different control devices. Therefore, they were all included in the profile assignments. A file containing control device codes for each profile was developed for use in identifying the type of control device used. Development of PM profile assignments is discussed further in Appendix E. Also included in this appendix are the listings of the PM profile assignments for point and area sources.

For several SCC's, profile assignment using engineering judgement was not possible. In such cases, industry-specific average profiles were developed from original profiles representing other SCC's within the same industry group. These profiles have numbers starting with 9 and are recommended for use only if there is no other information available. Another profile developed using engineering judgement was the "zero" profile (Profile 00000). This profile is an overall average of all the PM profiles in the data base. It is intended for use only as a default profile in applications where nonzero emissions are reported for those SCC's designated as having zero or negligible emission factors in the Criteria Pollutant Emission Factor document. Such applications may involve preparation of air toxics and acid precipitation emission inventories and acid precipitation modeling studies. The industry-specific average profiles and the "zero" profile are presented in Appendix D.

This document is divided into three sections. Section 1 contains this introduction. Section 2 describes the PM species profile format and discusses the applicability of PM profiles. Section 3 contains the profiles for both point and area sources, followed by the list of references. There are seven appendices that provide additional information:

Appendix A - Listing of PM Profiles
Appendix B - PM Profile Calculations
Appendix C - Particle Size Distribution Data
Appendix D - Industry-Specific Average PM Profiles and "Zero" Profile
Appendix E - PM Profile Assignments
Appendix F - Reactivity Fractions for the Alkaline Elements (Ca, Mg, Na, and K)
Appendix G - Data File Description

SECTION 2

PM SPECIES PROFILE FORMAT AND APPLICATION

2.1 PM SPECIES PROFILE FORMAT

Table 2-1 is an example of the format used in presenting the PM profiles in this document. This format is similar to that used in the Receptor Model Source Composition Library except for a few changes. Composition data and uncertainty information are reported in the Source Composition Library for size intervals 0-2.5 um, 2.5-10 um, and total particulate measured. In addition to these data, the PM profiles in the current document contain composition data for the 0-10 um size interval and uncertainty information for the 0-10 um interval. The size interval 0-10 um is of particular interest in PM_{10} source apportionment studies and in modeling and emission inventory preparation efforts under NAPAP. Therefore, composition data for this size range are also included in this document.

Another data item that is included in the profiles in this document is particle size distribution data (i.e., fraction of mass in a given size interval). The particle size distribution data can be used in estimating size-specific particulate emission rates in preparation of emission inventories. When combined with the composition data from the profiles, these data can be used to estimate size-specific and speciated particulate emission rates. In this document, size distribution data are coupled with the source profiles from the Source Composition Library to develop composition data for the 0-10 um size interval.

The profile ratings used in the Source Composition Library are adopted as data quality indicators. The ratings from the Source Composition Library, however, are modified to take into account the uncertainties associated with mass fraction data, calculational procedures used for the 0-10 um size interval, and also assumptions used in filling data gaps. As shown in Table 2-1, a dual data quality indicator is used for the profiles from the Source Composition Library. The first quality indicator is the

TABLE 2-1. SAMPLE PROFILE

Profile Name:Municipal Incinerator (Philadelphia)

Profile Number:17105

Profile Data Quality:B/D

Control Device:ESP(Inoperative)

Reference(s):52

Data Source:Dilution sampler. Representative sample from group of 10.

SCC : 50100101

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.26	0.31	0.38

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.819	0.117	5.827	0.466	2.400	0.657	2.400	NE
7440-21-3	14	SI	1.442	0.067	8.570	0.581	3.693	0.931	3.693	NE
7723-14-0	15	P	0.543	0.098	0.894	0.299	0.654	0.238	0.654	NE
7704-34-9	16	S	1.906	0.301	3.487	0.601	2.405	0.599	2.405	NE
7782-50-5	17	CL	21.299	0.985	16.678	2.218	19.840	3.100	19.840	NE
7440-09-7	19	K	6.464	0.305	4.491	0.640	5.841	0.903	5.841	NE
7440-70-2	20	CA	0.223	0.030	5.870	0.381	2.006	0.626	2.006	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.012	0.003	1.097	0.069	0.355	0.116	0.355	NE
7440-62-2	23	V	0.000	0.001	0.024	0.008	0.008	0.006	0.008	NE
7440-47-3	24	CR	0.015	0.001	0.111	0.009	0.045	0.012	0.045	NE
7439-96-5	25	MN	0.018	0.001	0.091	0.008	0.041	0.011	0.041	NE
7439-89-6	26	FE	0.279	0.013	1.874	0.129	0.783	0.204	0.783	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.032	0.002	0.085	0.010	0.049	0.011	0.049	NE
7440-50-8	29	CU	0.148	0.007	0.053	0.015	0.118	0.019	0.118	NE
7440-66-6	30	ZN	11.503	0.525	4.012	0.918	9.137	1.383	9.137	NE
7440-55-3	31	GA	0.016	0.011	0.000	0.022	0,011	0.017	0.011	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.000	0.031	0.000	0.071	0.000	0.053	0.000	NE

TABLE 2-1. SAMPLE PROFILE (Continued)

ontinued (profile=17105)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7782-49-2	34	SE	0.003	0.011	0.003	0.020	0.003	0.016	0.003	NE
7726-95-6	35	BR	0.563	0.027	0.375	0.057	0.504	0.078	0.504	NE
7440-17-7	37	RB	0.016	0.002	0.005	0.008	0.013	0.006	0.013	NE
7440-24-6	38	SR	0.009	0.002	0.023	0.008	0.013	0.006	0.013	NE
7440-67-7	40	ZR	0.000	0.014	0.000	0.039	0.000	0.028	0.000	NE
7439-98-7	42	MO	0.036	0.003	0.003	0.023	0.026	0.016	0.026	NE
7440-43-9	48	CD	0.284	0.016	0.024	0.049	0.202	0.045	0.202	NE
7440-31-5	50	SN	0.829	0.041	0.004	0.089	0.568	0.105	0.568	NE
7440-36-0	51	SB	0.442	0.028	0.086	0.113	0.330	0.091	0.330	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.020	0.029	0.000	0.242	0.014	0.167	0.014	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	0.009	0.004	0.011	0.012	0.010	0.009	0.010	NE
7439-92-1	82	PB	8.116	0.371	2.428	0.633	6.320	0.961	6.320	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	55.046		56.126		55.389		55.389	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

rating as it appears in the Source Composition Library, followed by the modified quality indicator. The presence of a single data quality indicator indicates the profile was developed during the current study. Each of the entries in Table 2-1 is described below:

Profile Name: The profile name is the descriptor used for the applicable source category.

Profile Number: This is a unique number assigned to each profile. Profiles are coded into four groups as follows: combustion sources (10000 series), industrial processes (20000 series), mobile sources (30000 series), and area sources (40000 series). New PM profiles developed during this study are also coded according to this general scheme. Composite profiles developed during this study from individual profiles are assigned profile numbers in the same series. For example, the profile Unpaved Roads - Composite is developed from Profiles 41201, 41203, and 41204 and assigned the number 41220. The industry-specific average profiles developed from available profiles to characterize source categories for which no data are available are assigned profile numbers beginning with 9. There are 16 such profiles (90001 through 90016) and they are presented in Appendix D. Profile 00000 is an overall average of the profiles in the data base. It is intended for use as a default profile in applications where nonzero emissions are reported for those SCC's designated as having zero or negligible emission factors in the Criteria Pollutant Emission Factor document. Profile 00000 is also presented in Appendix D.

Profile Data Quality: Dual data quality indicators are used in the profiles contained in this document (e.g., C/D). The first quality indicator is the profile rating as reported in the Source Composition Library. The second quality indicator is the modified rating assigned in this document. For a profile obtained from the Source Composition Library, the rating was modified to include the data quality associated with size distribution data and any assumptions associated with developing the composition data for the 0-10 um size interval and filling data gaps. The guidelines used in assigning data quality indicators were somewhat subjective. For those profiles that were not extracted from the Source Composition Library, a single data quality indicator is included.

It was assumed that the procedures for calculating composition data for the 0-10 um size interval using mass fraction data would lower the overall profile data quality by one level. Additional assumptions about missing data (e.g., no data reported for the 0-2.5 um size interval) would also lower the data quality by one or two levels. For example, Profile 29301 (Primary Lead Smelting - Slag Pouring) has a profile rating of "C" in the Source Composition Library. The mass fraction data for this profile has a data quality indicator of "E." For this profile, composition data for the 0-2.5 um and 2.5-10 um size intervals were not reported. To fill these two data gaps, it was assumed that the composition data for these two intervals are the same as the one for the total particulate measured. Thus, the data quality assigned to Profile 29301 in this document was modified as "E." Specifically, each data quality indicator represents the following:

Data Quality A:	Composition and mass fraction data obtained for the size intervals 0-2.5 um, 2.5-10 um, and total particulate measured from several sources using sound sampling and analytical methodology. Profiles are considered representative and recommended for use.
Data Quality B:	Composition and mass fraction data obtained for the size intervals 0-2.5 um, 2.5-10 um, and total particulate measured from a few sources using a generally sound methodology.
Data Quality C:	Composition data obtained for the size intervals 0-2.5 um, 2.5-10 um, and total particulate measured from a few sources using a generally sound methodology and mass fraction data of below average quality; or composition data obtained for two of the three size intervals 0-2.5 um, 2.5-10 um, and total particulate measured from a large number of sources using a sound methodology coupled with mass fraction data of below average quality.

Data Quality D: Composition data obtained for size intervals 0-2.5 um, 2.5-10 um, and total particulate measured obtained from a limited number of sources using uncertain or undocumented methodology coupled with mass fraction data of average or below average quality; or composition data obtained for two of the three size intervals 0-2.5 um, 2.5-10 um, and total particulate measured from a few sources using a generally sound methodology coupled with mass fraction data of poor quality.

Data Quality E: Composition data obtained for the size intervals 0-2.5 um, 2.5-10 um, and total particulate measured from a single source using poorly documented methodology coupled with mass fraction data of poor quality; or composition data obtained for two of the three size intervals 0-2.5 um, 2.5-10 um, and total particulate measured from a limited number of sources using poorly documented methodology coupled with mass fraction data of poor quality; or composition data obtained for one of the three size intervals 0-2.5 um, 2.5-10 um, and total particulate measured coupled with mass fraction data of poor quality; or industry-specific average profiles; profiles with "E" rating are recommended for use only if there is no other information available.

Control Device: This entry is used to indicate if the profile data represent an emission stream downstream or upstream of a control device (if present). The downstream composition and size distribution of particulate emissions would be affected by the presence of a control device.

Reference(s): This entry identifies the primary reference(s) used in development of the profiles. The reference list is the same as that contained in the Source Composition Library except for additional references used in developing the new profiles. If more detailed information is required about the data contained in the profile, the user/reader should consult these reference(s).

Data Source: This entry briefly describes the basis of the composition data used in the profile (e.g., number of tests, sources and samples, sampling and analytical methods, how data were composited, etc.). More detailed information about the data used can be obtained from the references indicated in the profile.

SCC: This entry is the code for the source category for which the profile was originally developed. These codes are obtained from NEDS for point sources (1-01-001-01 through 5-03-900-10) and area sources (01 through 64). Area source codes from 65 through 115 developed under NAPAP are also considered. A listing of area source codes included in this document and their descriptions is presented in Appendix E.

Mass Fraction Data: Size distribution data (i.e., the fraction of mass [particulate emissions] contained within a specific size range) are reported in this entry. Three size ranges are considered: 0-2.5 um, 0-6 um, and 0-10 um. Mass fraction data for 0-2.5 um and 0-10 um size ranges are used to estimate composition data for the 0-10 um size range. Mass fraction data for the 0-6 um interval are presented as additional information. A large proportion of the mass fraction data was obtained from AP-42. A detailed description of the mass fraction data (how data were compiled, data quality, references, etc.) used in this document is included in Appendix C.

One area of concern is that the mass distribution data and the source profiles used to estimate composition of the 0-10 um size range are not from the same data set and represent data collected from different emission sources. This introduces an additional source of uncertainty in the calculations of composition data for the 0-10 um size interval.

Species Identification: Each species in the profile data is identified by a species number, species name, and CAS number. In general, the species number is the atomic number for the element. Other species are arbitrarily assigned the numbers starting with 200 (e.g., total carbon - 200; organic carbon - 201; elemental carbon - 202; sulfate ion - 203, etc.). The CAS numbers for the species were obtained from the Registry of Toxic Effects of Chemical Substances (1983 Supplement to the 1981-82 edition).

The species listed in Table 2-1 are those that are most commonly reported in the literature. As indicated in the Source Composition Library, for those profiles that include other key species, any standard component may be deleted to permit inclusion of a nonstandard component. Therefore, some variability exists in the profile format with respect to the list of species considered.

Composition Data: In a typical profile, composition data expressed as weight percent are presented for four size ranges: 0-2.5 um, 2.5-10 um, 0-10 um, and total particulate measured. Values for the 0-2.5 um, 2.5-10 um, and total particulate measured are based on actual data and are extracted directly from the Source Composition Library, where available. Values for the 0-10 um size interval are derived from calculations based on the methodology described in the Source Composition Library (refer to Appendix B). In each profile, footnote (a) indicates that the information for a specific size interval is extracted from the Source Composition Library. Footnote (b) indicates that the data are based on calculations described in Appendix B.

In some cases, profile data were not complete, i.e., data were only reported for one or two size intervals. In these cases, engineering judgement was used to fill the data gaps. For example, in Profile 17106 (Municipal Incinerator - Composite), composition data are reported only for the total particulate measured as indicated by footnote (a) for the last column in the profile. In absence of other information, it was assumed that the composition data for the 0-2.5 um and 2.5-10 um size intervals were the same as that for the total particulate measured. This assumption is indicated by footnote (c) for these two size intervals. The following symbols are used in the composition data: NA (not analyzed), NE (not estimated), and < (below the detection limit). The NE symbol is used in cases where a specific calculation could not be carried out due to missing data (e.g., NA, <).

Following the data tabulation, the percent of mass accounted for by the composition data under each size interval is presented. This value is based on the summation of weight percentages of the species in a given column. The sum does not include oxygen, hydrogen, nitrogen, water, or other components that were not included in the analysis. In some profiles, the summation of weight percentages may be greater than 100 due to double counting (e.g., sulfur/sulfate, total carbon/elemental carbon/organic carbon, etc.). Failure to include the carbonaceous, oxygen, and hydrogen components in the aerosol characterization is often the largest source of unexplained mass.

Since the composition data in weight percentages are associated with a specific size interval, it is not possible to add the percentages for a particular species across size intervals. For example, in Table 2-1, the percentages for Al in the 0-2.5 um, 2.5-10 um, and 0-10 um size intervals are 0.819, 5.827, and 2.400; and 0.819 + 5.827 ≠ 2.400.

Uncertainty: The uncertainty associated with composition data for the size ranges 0-2.5 um, 2.5-10 um, and the total particulate measured are based on either the estimated analytical precision of the measurement (single sample) or the standard deviation of the data sets. The uncertainty associated with the 0-10 um size range is calculated according to the procedure outlined in the Source Composition Library (refer to Appendix B). As Table 2-1 shows, the footnotes for the uncertainty columns indicate whether they are based on data (i.e., extracted from the Source Composition Library) or calculated. In many cases, uncertainties were either not reported or not known by the authors. The abbreviations used for uncertainty values include NR (not reported) and NE.

Date: This entry will be used to indicate the date the profile was last reviewed/updated by EPA.

2.2 LIMITATIONS OF DATA

As indicated in the Source Composition Library, the reader/user should be aware of the limitations of each data set, specifically with respect to measurements of carbonaceous emissions and volatile elements (e.g., Pb, As, Hg, etc.) that partially exist in the gaseous phase at high stack temperatures. Unless special precautions such as dilution source sampling, aircraft or balloon methods are exercised, these components will not be accurately represented in the data. In addition, many of the studies from literature do not report a sufficiently broad range of particulate matter components to account for the majority of the mass, typically due to the specific sampling and analytical protocols employed. Therefore, studies that use these source profiles (e.g., receptor modeling) may be unable to apportion all of the ambient aerosol mass accurately. Thus, the user/reader is cautioned to use these profiles with discretion. The profile data should be carefully reviewed to ensure that they represent the sources being studied reasonably well.

In estimating composition data for the 0-10 um size interval, size distribution data were combined with composition data reported for the 0-2.5 um and 2.5-10 um size intervals. The size distribution data and the composition data from the source profiles represent data collected from different emission sources. Therefore, this introduces an additional source of uncertainty in calculating composition data for the 0-10 um size interval.

In several profiles from the Source Composition Library, composition data information for one or two size intervals were not reported. To increase the usefulness of the profiles, certain assumptions were employed to fill these data gaps.

- If data were reported for a single size interval, it was assumed that data for the other two intervals were the same. Values for the 0-10 um size interval were also assumed to be the same.
- If data for the 0-2.5 um size interval were missing, it was assumed the data for the 2.5-10 um size interval could be substituted and vice versa. Values for the 0-10 um size interval were also assumed to be the same.
- If data for the total particulate measured were not reported, assume the estimated data for the 0-10 um size fraction can be substituted.

Since the chemical composition of particulate emissions of many sources is a function of particle size, application of data based on total particulate measured to particulate mass in the fine particle fraction (0-2.5 um) or coarse particle fraction (2.5-10 um) may affect the validity of the analysis. Where such an assumption is made, it is indicated with a footnote in each profile.

As pointed out in the Source Composition Library, the user/reader should be aware of the potential variability in the chemical composition of emissions, both within a source group and between similar sources. Due to limited availability of high-quality, size-resolved profile data sets, an indepth evaluation of the magnitude of profile variability is not possible. However, comparisons of profiles based on literature on the total particulate measured indicate that profile variability is dependent on the chemical composition of fuels or process materials, volatility, and sampling and analytical procedures.

Profiles for individual sources may vary considerably from the values provided in this document. Source-specific data from local sources are therefore preferable to the use of literature data and are recommended, particularly for regulatory applications. Nevertheless, preliminary analyses based on source profiles in this document may be adequate to meet a number of objectives. The reader/user must ultimately assess whether the data in the document are appropriate for use in any particular application.

2.3 PM SPECIES PROFILE APPLICATION

There are several ongoing EPA activities that require speciated PM data as an input parameter. These activities include preparation of air toxics emission inventories, receptor modeling, preparation of acid precipitation inventories, and acid precipitation modeling studies. This section briefly discusses how to use this document. It also provides a specific example to illustrate how to use PM species profiles in preparation of an air toxics emission inventory.

2.3.1 Document Guide

In addition to the profiles contained in Section 3, this document includes PM profile assignments for point and area source categories in Appendix E. Tables E-1 and E-2 in Appendix E contain the PM profile assignments for point and area sources, respectively. To identify the applicable profile for a given source category, the user/reader should refer to Tables E-1 and E-2. The actual profile is contained in Section 3 and its location in Section 3 can be identified from a numerical listing in Table A-1 in Appendix A.

2.3.2 Example of Use of a Profile

A hypothetical example will be used to describe how profiles might be applied: a State air pollution control agency is developing an air toxics emission inventory for the State. An earlier study conducted for the State has identified a list of potentially toxic species from several emission sources. The emission rates of these individual species will be used as an input to the proposed air toxics regulatory program for the State. The proposed program advocates regulating particulate species in the fine fraction (i.e., <2.5 um).

The PM profiles can identify the relative amounts of individual particulate species within specified size intervals in a given emission stream. In most cases, emission factors are available for total particulate matter where the elemental breakdown is not specified (e.g., AP-42, Criteria Pollutant Emission Factor document). The information contained in this document supplements the general emissions data in AP-42 or the Criteria Pollutant Emission Factor Document. For a given source category, the appropriate PM species profile should be identified using Appendix E and the total particulate emission factor should be multiplied by the weight fractions for each species in a given size interval as given in the profile to determine size-specific individual emission factors.

In this example, cadmium is one of the species on the State's list and emissions from a coal-fired power plant with no particulate matter controls are a major concern. From Appendix E, the reader/user identifies the appropriate profile. The power plant has pulverized coal type boilers and it burns bituminous coal. Therefore, the appropriate SCC is 1-01-002-01. The SCC and emission factor for a specific category can be obtained from NEDS or the Criteria Pollutant Emission Factor Document. From Table E-1, the appropriate profile for 1-01-002-01 is Profile 11201. The reader/user can then refer to Table A-1 in Appendix A to determine the location of this profile in the document. From this table, Profile 11201 is on page 24. At this point, the reader/user should review the "Control Device" and "Data Source" descriptions for the profile to ensure the data apply to the specific situation on hand. If there are any questions, the reader/user should review the original reference on which the profile is based. As indicated in the profile, the data are for a coal-fired power plant with an ESP as the control device. The plant in the example, however, has no controls. Although the presence of a control device affects the size distribution and composition of particulate emissions, the data in Profile 11201 can be used for screening purposes. The data contained in the profile is based on a representative sample from a set of nine samples collected with a dilution train. The data quality associated with this profile is reported as "B/D."

In Profile 11201 the weight percentage of cadmium (Cd) under the "0-2.5 um" column is 0.012 and the fraction of mass associated with this size interval is 0.29. Applying the weight fraction of cadmium to the total particulate emissions of 1,500,000 lb/yr for the power plant, cadmium emissions in the fine fraction are estimated as 1,500,000 x 0.00012 x 0.29 = 52 lb/yr. The uncertainty associated with the cadmium weight percentage is reported as 0.013 percent in the profile. From this information, a range for cadmium emissions can be specified as follows:

$$1{,}500{,}000 \times 0.29 \times (0.00012 - 0.00013) = 0 \text{ lb/yr}$$
$$1{,}500{,}000 \times 0.29 \times (0.00012 + 0.00013) = 109 \text{ lb/yr}$$

Thus, the annual cadmium emissions in the 0-2.5 um size range may be expected to range from 0 to 109 lb/yr, with a mean of 52 lb/yr.

SECTION 3

PM SPECIES PROFILES - POINT AND AREA SOURCES

This section contains the 144 PM profiles grouped in 18 separate subsections according to source categories. The profiles representing point sources are presented first, followed by those representing area sources. The following list can be used to identify and locate the profiles for each source category group. Individual profiles within each source category group are presented in numerical order.

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3.1 EXTERNAL COMBUSTION BOILERS

External combustion sources include utility, industrial, commercial and institutional boilers; commercial and domestic combustion units; process heaters, furnaces, and kilns. Coal, oil, and natural gas are the major fossil fuels used by these sources.

Profile Name:Coal-Fired Power Plant

Profile Number:11201

Profile Data Quality:B/D

Control Device:ESP

Reference(s):52

Data Source:Dilution train samples. Representative sample from set of 9.

SCC : 10100201

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.29	0.50	0.67

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	15.679	0.789	14.205	0.742	14.843	1.377	14.843	NE
7440-21-3	14	SI	23.837	1.192	22.872	1.191	23.290	2.150	23.290	NE
7723-14-0	15	P	0.620	0.114	0.279	0.060	0.427	0.070	0.427	NE
7704-34-9	16	S	3.305	0.180	0.656	0.043	1.803	0.221	1.803	NE
7782-50-5	17	CL	0.094	0.041	0.102	0.013	0.099	0.020	0.099	NE
7440-09-7	19	K	1.304	0.069	1.436	0.076	1.379	0.127	1.379	NE
7440-70-2	20	CA	1.235	0.080	1.514	0.080	1.393	0.129	1.393	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.967	0.050	1.008	0.053	0.990	0.091	0.990	NE
7440-62-2	23	V	0.079	0.007	0.066	0.006	0.072	0.007	0.072	NE
7440-47-3	24	CR	0.058	0.004	0.051	0.003	0.054	0.005	0.054	NE
7439-96-5	25	MN	0.043	0.003	0.046	0.003	0.045	0.004	0.045	NE
7439-89-6	26	FE	8.491	0.428	9.524	0.496	9.077	0.831	9.077	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.049	0.004	0.032	0.002	0.039	0.004	0.039	NE
7440-50-8	29	CU	0.031	0.003	0.027	0.002	0.029	0.003	0.029	NE
7440-66-6	30	ZN	0.069	0.005	0.045	0.003	0.055	0.006	0.055	NE
7440-55-3	31	GA	0.027	0.003	0.021	0.002	0.024	0.003	0.024	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.081	0.006	0.036	0.003	0.055	0.006	0.055	NE

continued (profile=11201)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	0.036	0.003	0.005	0.001	0.018	0.003	0.018	NE
7726-95-6	35	BR	0.000	0.007	0.000	0.002	0.000	0.003	0.000	NE
7440-17-7	37	RB	0.009	0.002	0.012	0.001	0.011	0.001	0.011	NE
7440-24-6	38	SR	0.124	0.007	0.159	0.009	0.144	0.013	0.144	NE
7440-67-7	40	ZR	0.076	0.003	0.035	0.007	0.053	0.006	0.053	NE
7440-22-4	47	AG	0.022	0.010	0.002	0.004	0.011	0.005	0.011	NE
7440-43-9	48	CD	0.012	0.013	0.000	0.006	0.005	0.006	0.005	NE
7440-31-5	50	SN	0.000	0.020	0.011	0.008	0.006	0.009	0.006	NE
7440-36-0	51	SB	NR	NR	NR	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.000	0.098	0.098	0.040	0.056	0.046	0.056	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	0.000	0.006	<	0.003	NE	NE	NE	NE
7439-92-1	82	PB	0.036	0.006	0.025	0.003	0.030	0.004	0.030	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	56.284		52.267		54.008		54.008	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Oil-Fired Power Plant

Profile Number:11501

Profile Data Quality:B/D

Control Device:Mechanical collector

Reference(s):52

Data Source:Dilution train sample. Representative sample from set of 9. Plant burns No. 6 fuel oil.

SCC : 10100401

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.52	0.58	0.71

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	1.468	0.068	10.126	0.992	3.785	1.286	3.785	NE
7440-21-3	14	SI	2.512	0.115	20.321	1.909	7.278	2.542	7.278	NE
7723-14-0	15	P	1.012	0.184	2.484	1.140	1.406	0.890	1.406	NE
7704-34-9	16	S	11.027	0.513	9.718	2.498	10.677	2.410	10.677	NE
7782-50-5	17	CL	0.000	0.129	0.000	0.601	0.000	0.450	0.000	NE
7440-09-7	19	K	0.217	0.011	0.386	0.386	0.262	0.287	0.262	NE
7440-70-2	20	CA	2.353	0.110	10.805	1.141	4.615	1.420	4.615	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.129	0.129	1.122	0.110	0.395	0.171	0.395	NE
7440-62-2	23	V	1.504	0.069	1.944	0.370	1.622	0.375	1.622	NE
7440-47-3	24	CR	0.051	0.090	0.127	0.050	0.071	0.077	0.071	NE
7439-96-5	25	MN	0.039	0.002	0.069	0.015	0.047	0.014	0.047	NE
7439-89-6	26	FE	2.043	0.094	3.715	0.578	2.490	0.614	2.490	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	2.036	0.093	1.208	0.422	1.814	0.400	1.814	NE
7440-50-8	29	CU	NR	NR	NR	NR	NE	NE	NE	NE
7440-66-6	30	ZN	1.095	0.050	0.710	0.231	0.992	0.220	0.992	NE
7440-55-3	31	GA	0.010	0.002	0.030	0.015	0.015	0.012	0.015	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.008	0.007	0.022	0.053	0.012	0.039	0.012	NE

continued (profile=11501)

								Total Particulate	
	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.003	0.002	0.000	0.010	0.002	0.007	0.002	NE
7726-95-6	35	BR	0.004	0.002	0.010	0.009	0.006	0.007	0.006	NE
7440-17-7	37	RB	0.003	0.001	0.000	0.007	0.002	0.005	0.002	NE
7440-24-6	38	SR	0.031	0.002	0.159	0.020	0.065	0.022	0.065	NE
7440-67-7	40	ZR	0.003	0.004	0.166	0.047	0.047	0.039	0.047	NE
7439-98-7	42	MO	0.169	0.008	0.085	0.050	0.147	0.042	0.147	NE
7440-43-9	48	CD	0.002	0.003	0.000	0.050	0.001	0.037	0.001	NE
7440-31-5	50	SN	0.019	0.005	0.000	0.070	0.014	0.051	0.014	NE
7440-36-0	51	SB	0.074	0.010	0.230	0.145	0.116	0.109	0.116	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.219	0.025	0.000	0.358	0.160	0.264	0.160	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	0.000	0.001	0.000	0.012	0.000	0.009	0.000	NE
7439-92-1	82	PB	1.423	0.065	0.422	0.278	1.155	0.260	1.155	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	27.454		63.859		37.196		37.196	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Wood-Fired Boiler

Profile Number:11801

Profile Data Quality:B/D

Control Device:Multicyclone

Reference(s):21

Data Source:Sampled with a stage virtual impactor.

SCC : 10100902

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.16	0.27	0.32

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	0.150	0.050	0.110	0.041	0.130	0.035	0.130	NE
7440-23-5	11	NA	3.400	2.900	0.690	0.960	2.045	1.547	2.045	NE
7439-95-4	12	MG	<	1.000	0.460	0.170	NE	NE	NE	NE
7429-90-5	13	AL	0.240	0.180	0.280	0.090	0.260	0.104	0.260	NE
7440-21-3	14	SI	0.760	0.370	0.960	0.140	0.860	0.216	0.860	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	8.800	2.400	0.590	0.090	4.695	1.353	4.695	NE
7782-50-5	17	CL	9.500	4.900	0.830	0.760	5.165	2.569	5.165	NE
7440-09-7	19	K	22.400	11.200	1.300	0.210	11.850	5.821	11.850	NE
7440-70-2	20	CA	5.600	4.000	5.200	0.520	5.400	2.088	5.400	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	0.060	0.097	0.080	NE	NE	NE	NE
7440-62-2	23	V	<	0.002	0.005	0.003	NE	NE	NE	NE
7440-47-3	24	CR	0.015	0.006	0.007	0.001	0.011	0.003	0.011	NE
7439-96-5	25	MN	0.510	0.340	0.290	0.040	0.400	0.176	0.400	NE
7439-89-6	26	FE	1.260	0.880	0.920	0.220	1.090	0.467	1.090	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.006	0.004	<	0.005	NE	NE	NE	NE
7440-50-8	29	CU	0.120	0.060	0.023	0.004	0.071	0.031	0.071	NE
7440-66-6	30	ZN	0.730	0.340	0.039	0.005	0.385	0.178	0.385	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=11801)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.055	0.030	0.001	0.001	0.028	0.016	0.028	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.420	0.220	0.020	0.003	0.220	0.114	0.220	NE
	201	OC	NA	NR	11.100	5.400	NE	NE	NE	NE
	202	EC	NA	NR	4.300	1.400	NE	NE	NE	NE
	203	SO4	33.800	9.000	1.500	0.370	17.650	5.100	17.650	NE
	204	NO3	0.510	0.230	0.200	0.130	0.355	0.138	0.355	NE
		SUM =	88.276		28.922		58.600		58.600	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:External Combustion Boiler - Coal-Slurry Fired

Profile Number:12201

Profile Data Quality:D

Control Device:Uncontrolled

Reference(s):61

Data Source:Boiler flue gas SASS train samples analyzed for 73 elements by spark source mass spectroscopy and atomic absorption spectroscopy.

SCC : 10200213

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.31	0.34	0.37

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7439-93-2	3	LI	0.007	NR	0.003	NR	0.006	NE	0.006	NE
7440-41-7	4	BE	0.000	NR	0.001	NR	0.000	NE	0.000	NE
7440-42-8	5	B	0.120	NR	0.001	NR	0.101	NE	0.101	NE
7782-41-4	9	F	0.180	NR	0.016	NR	0.153	NE	0.153	NE
7440-23-5	11	NA	3.460	NR	0.820	NR	3.032	NE	3.032	NE
7439-95-4	12	MG	0.450	NR	0.120	NR	0.396	NE	0.396	NE
7429-90-5	13	AL	7.330	NR	3.130	NR	6.649	NE	6.649	NE
7440-21-3	14	SI	12.400	NR	6.060	NR	11.372	NE	11.372	NE
7723-14-0	15	P	0.280	NR	0.160	NR	0.261	NE	0.261	NE
7704-34-9	16	S	0.520	NR	0.550	NR	0.525	NE	0.525	NE
7782-50-5	17	CL	0.840	NR	0.041	NR	0.710	NE	0.710	NE
7440-09-7	19	K	0.450	NR	0.210	NR	0.411	NE	0.411	NE
7440-70-2	20	CA	0.238	NR	0.440	NR	0.271	NE	0.271	NE
7440-20-2	21	SC	0.006	NR	0.001	NR	0.005	NE	0.005	NE
7440-32-6	22	TI	0.450	NR	0.250	NR	0.418	NE	0.418	NE
7440-62-2	23	V	0.040	NR	0.018	NR	0.036	NE	0.036	NE
7440-47-3	24	CR	0.002	NR	0.017	NR	0.004	NE	0.004	NE
7439-96-5	25	MN	0.053	NR	0.009	NR	0.046	NE	0.046	NE
7439-89-6	26	FE	4.050	NR	2.410	NR	3.784	NE	3.784	NE
7440-48-4	27	CO	0.003	NR	0.001	NR	0.003	NE	0.003	NE
7440-02-0	28	NI	0.048	NR	0.003	NR	0.041	NE	0.041	NE
7440-50-8	29	CU	0.007	NR	0.011	NR	0.008	NE	0.008	NE
7440-66-6	30	ZN	0.007	NR	0.009	NR	0.007	NE	0.007	NE
7440-55-3	31	GA	0.043	NR	0.002	NR	0.036	NE	0.036	NE
7440-56-4	32	GE	0.005	NR	0.000	NR	0.004	NE	0.004	NE

continued (profile=12201)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-38-2	33	AS	0.044	NR	0.003	NR	0.037	NE	0.037	NE
7782-49-2	34	SE	0.003	NR	0.002	NR	0.003	NE	0.003	NE
7726-95-6	35	BR	0.003	NR	0.004	NR	0.003	NE	0.003	NE
7440-17-7	37	RB	0.002	NR	0.004	NR	0.002	NE	0.002	NE
7440-24-6	38	SR	0.030	NR	0.100	NR	0.041	NE	0.041	NE
7440-65-5	39	Y	0.012	NR	0.008	NR	0.011	NE	0.011	NE
7440-67-7	40	ZR	0.005	NR	0.023	NR	0.008	NE	0.008	NE
74400-30-1	41	NB	0.001	NR	0.002	NR	0.001	NE	0.001	NE
7439-98-7	42	MO	0.008	NR	0.007	NR	0.008	NE	0.008	NE
7440-18-8	44	RU	NR	NR	NR	NR	NE	NE	NE	NE
7440-16-6	45	RH	NR	NR	NR	NR	NE	NE	NE	NE
7440-05-3	46	PD	NR	NR	NR	NR	NE	NE	NE	NE
7440-22-4	47	AG	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-43-9	48	CD	0.003	NR	0.003	NR	0.003	NE	0.003	NE
7440-31-5	50	SN	0.001	NR	0.001	NR	0.001	NE	0.001	NE
7440-36-0	51	SB	0.002	NR	0.002	NR	0.002	NE	0.002	NE
13494-80-9	52	TE	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7553-56-2	53	I	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-46-2	55	CS	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-39-3	56	BA	0.160	NR	0.100	NR	0.150	NE	0.150	NE
7439-91-0	57	LA	0.005	NR	0.008	NR	0.005	NE	0.005	NE
7440-45-1	58	CE	0.006	NR	0.009	NR	0.006	NE	0.006	NE
7440-10-0	59	PR	0.001	NR	0.002	NR	0.001	NE	0.001	NE
7440-00-8	60	ND	0.001	NR	0.002	NR	0.001	NE	0.001	NE
7440-19-9	62	SM	0.001	NR	0.002	NR	0.001	NE	0.001	NE
7440-53-1	63	EU	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-54-2	64	GD	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-27-9	65	TB	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7429-91-6	66	DY	0.000	NR	0.001	NR	0.000	NE	0.000	NE

continued (profile=12201)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-60-0	67	HO	0.000	NR	0.001	NR	0.000	NE	0.000	NE
7440-52-0	68	ER	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-30-4	69	TM	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-64-4	70	YB	0.000	NR	0.001	NR	0.000	NE	0.000	NE
7439-94-3	71	LU	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-58-6	72	HF	0.000	NR	0.000	NR	0.000	NE	0.000	NE
7440-25-7	73	TA	0.000	NR	0.002	NR	0.000	NE	0.000	NE
7440-33-7	74	W	0.000	NR	0.001	NR	0.000	NE	0.000	NE
7440-15-5	75	RE	NR	NR	NR	NR	NE	NE	NE	NE
7440-04-2	76	OS	NR	NR	NR	NR	NE	NE	NE	NE
7439-88-5	77	IR	NR	NR	NR	NR	NE	NE	NE	NE
7440-06-4	78	PT	NR	NR	NR	NR	NE	NE	NE	NE
7440-57-5	79	AU	NR	NR	NR	NR	NE	NE	NE	NE
7439-97-6	80	HG	NR	NR	NR	NR	NE	NE	NE	NE
7440-28-0	81	TL	0.001	NR	NR	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.008	NR	0.015	NR	0.009	NE	0.009	NE
7440-69-9	83	BI	0.000	NR	NR	NR	NE	NE	NE	NE
7440-29-1	90	TH	0.001	NR	0.003	NR	0.001	NE	0.001	NE
7440-61-1	92	U	0.001	NR	0.002	NR	0.001	NE	0.001	NE
	201	OC	NR	NR	NR	NR	NE	NE	NE	NE
	202	EC	NR	NR	NR	NR	NE	NE	NE	NE
	203	SO4	NR	NR	NR	NR	NE	NE	NE	NE
	204	NO3	NR	NR	NR	NR	NE	NE	NE	NE
		SUM =	31.288		14.591		28.575		28.575	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Wood-Fired Boiler

Profile Number:12704

Profile Data Quality:B/D

Control Device:Wet Scrubber

Reference(s):49

Data Source:Average of 3 replicates. Dilution sampler with 2-stage virtual impactor.

SCC : 10200902

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.98	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.020	0.020	0.020	NE	0.020	NE	NA	NR
7440-42-8	5	B	0.250	0.130	0.250	NE	0.250	NE	NA	NR
7782-41-4	9	F	1.600	0.400	1.600	NE	1.600	NE	2.275	0.378
7440-23-5	11	NA	7.260	0.730	7.260	NE	7.260	NE	NA	NR
7439-95-4	12	MG	1.140	0.114	1.140	NE	1.140	NE	NA	NR
7429-90-5	13	AL	1.410	0.990	1.410	NE	1.410	NE	1.603	0.857
7440-21-3	14	SI	0.910	0.550	0.910	NE	0.910	NE	1.175	0.470
7723-14-0	15	P	0.760	0.250	0.760	NE	0.760	NE	0.856	0.213
7704-34-9	16	S	2.600	0.260	2.600	NE	2.600	NE	2.742	0.274
7782-50-5	17	CL	20.400	2.200	20.400	NE	20.400	NE	19.530	2.152
7440-09-7	19	K	16.300	3.300	16.300	NE	16.300	NE	15.505	2.990
7440-70-2	20	CA	3.700	2.100	3.700	NE	3.700	NE	4.120	1.793
7440-32-6	22	TI	0.048	0.021	0.048	NE	0.048	NE	0.056	0.018
7440-62-2	23	V	0.005	0.006	0.005	NE	0.005	NE	0.009	0.005
7440-47-3	24	CR	0.008	0.002	0.008	NE	0.008	NE	0.009	0.002
7439-96-5	25	MN	0.340	0.170	0.340	NE	0.340	NE	0.373	0.145
7439-89-6	26	FE	0.980	0.430	0.980	NE	0.980	NE	1.071	0.366
7440-48-4	27	CO	0.060	0.060	0.060	NE	0.060	NE	NA	NR
7440-02-0	28	NI	0.005	0.005	0.005	NE	0.005	NE	0.005	0.004
7440-50-8	29	CU	0.037	0.007	0.037	NE	0.037	NE	0.033	0.006
7440-66-6	30	ZN	0.640	0.210	0.640	NE	0.640	NE	0.601	0.179
7440-38-2	33	AS	0.028	0.007	0.028	NE	0.028	NE	0.025	0.006
7782-49-2	34	SE	0.002	0.002	0.002	NE	0.002	NE	0.002	0.002
7726-95-6	35	BR	0.181	0.020	0.181	NE	0.181	NE	0.175	0.020
7440-17-7	37	RB	0.045	0.006	0.045	NE	0.045	NE	0.045	0.005

continued (profile=12704)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-24-6	38	SR	0.035	0.016	0.035	NE	0.035	NE	0.040	0.014
7440-67-7	40	ZR	0.008	0.008	0.008	NE	0.008	NE	0.011	0.008
7439-98-7	42	MO	0.025	0.013	0.025	NE	0.025	NE	0.030	0.031
7440-05-3	46	PD	0.004	0.004	0.004	NE	0.004	NE	0.006	0.004
7440-22-4	47	AG	0.007	0.007	0.007	NE	0.007	NE	0.010	0.007
7440-43-9	48	CD	0.002	0.020	0.002	NE	0.002	NE	0.007	0.018
7440-74-6	49	IN	0.010	0.010	0.010	NE	0.010	NE	0.015	0.011
7440-31-5	50	SN	0.013	0.013	0.013	NE	0.013	NE	0.019	0.013
7440-36-0	51	SB	0.024	0.034	0.024	NE	0.024	NE	0.029	0.045
7440-39-3	56	BA	0.055	0.055	0.055	NE	0.055	NE	0.087	0.062
7439-91-0	57	LA	0.065	0.065	0.065	NE	0.065	NE	0.103	0.073
7440-45-1	58	CE	0.004	0.003	0.004	NE	0.004	NE	0.005	0.003
7439-97-6	80	HG	0.206	0.033	0.206	NE	0.206	NE	0.210	0.031
7439-92-1	82	PB	1.300	1.300	1.300	NE	1.300	NE	NA	NR
	201	OC	5.600	0.600	5.600	NE	5.600	NE	7.070	0.858
	202	EC	4.600	0.600	4.600	NE	4.600	NE	4.450	0.536
	203	SO4	7.000	1.100	7.000	NE	7.000	NE	7.285	0.982
	204	NO3	0.085	0.085	0.085	NE	0.085	NE	0.134	0.095
		SUM =	77.772		77.772		77.772		69.721	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Residual Oil Combustion

Profile Number:13501

Profile Data Quality:A/C

Control Device:Uncontrolled

Reference(s):46

Data Source:Sampled with a 2-stage virtual impactor and Method 5 heated probe. Average of 8 samples from schools, hospitals, apartments, and industrial boilers. Analysis by XRF,INNA IC, and carbon oxidation.

SCC : 10300401

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.23	0.44	0.62

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	0.053	0.019	0.052	0.019	0.052	0.011	0.052	NE
7440-23-5	11	NA	3.500	1.700	3.500	1.700	3.500	0.929	3.500	NE
7439-95-4	12	MG	<	3.000	<	3.000	NE	NE	NE	NE
7429-90-5	13	AL	0.530	0.240	0.530	0.240	0.530	0.132	0.530	NE
7440-21-3	14	SI	0.960	0.480	0.960	0.480	0.960	0.262	0.960	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	13.300	2.400	13.300	2.400	13.300	1.600	13.300	NE
7782-50-5	17	CL	<	0.100	<	0.100	NE	NE	NE	NE
7440-09-7	19	K	0.280	0.100	0.280	0.100	0.280	0.056	0.280	NE
7440-70-2	20	CA	1.580	0.640	1.580	0.640	1.580	0.356	1.580	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.110	0.038	0.110	0.038	0.110	0.022	0.110	NE
7440-62-2	23	V	3.440	0.750	3.440	0.750	3.440	0.469	3.440	NE
7440-47-3	24	CR	0.047	0.015	0.047	0.015	0.047	0.009	0.047	NE
7439-96-5	25	MN	0.046	0.013	0.046	0.013	0.046	0.008	0.046	NE
7439-89-6	26	FE	2.970	0.610	2.970	0.610	2.970	0.389	2.970	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	5.360	1.210	5.360	1.210	5.360	0.749	5.360	NE
7440-50-8	29	CU	0.075	0.025	0.075	0.025	0.075	0.014	0.075	NE
7440-66-6	30	ZN	0.400	0.180	0.400	0.180	0.400	0.099	0.400	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=13501)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.013	0.021	0.013	0.021	0.013	0.011	0.013	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.110	0.064	0.110	0.064	0.110	0.035	0.110	NE
	201	OC	7.800	6.200	7.800	6.200	7.800	3.304	7.800	NE
	202	EC	2.420	2.500	2.420	2.500	2.420	1.324	2.420	NE
	203	SO4	48.100	11	48.100	11	48.100	NE	48.100	NE
	204	NO3	0.650	0.440	0.650	0.440	0.650	0.236	0.650	NE
		SUM =	91.744		91.743		91.743		91.743	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Coal-Fired Power Utility Fly Ash (SRM 1633)

Profile Number:43303

Profile Data Quality:A/C

Control Device:ESP catch

Reference(s):9

Data Source:Fly ash taken from several power plant control systems. Not representative of stack emissions.

SCC : 10100101

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.00	0.001	0.004

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	<	NE	<	NE	<	NE	<	NR
7440-42-8	5	B	<	NE	<	NE	<	NE	<	NR
7782-41-4	9	F	<	NE	<	NE	<	NE	<	NR
7440-23-5	11	NA	0.340	NE	0.340	NE	0.340	NE	0.340	0.200
7439-95-4	12	MG	1.500	NE	1.500	NE	1.500	NE	1.500	0.160
7429-90-5	13	AL	13.200	NE	13.200	NE	13.200	NE	13.200	0.500
7440-21-3	14	SI	21.000	NE	21.000	NE	21.000	NE	21.000	2.000
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	<	NE	<	NE	<	NE	<	NR
7782-50-5	17	CL	0.004	NE	0.004	NE	0.004	NE	0.004	0.001
7440-09-7	19	K	1.600	NE	1.600	NE	1.600	NE	1.600	0.080
7440-70-2	20	CA	4.200	NE	4.200	NE	4.200	NE	4.200	0.400
7440-20-2	21	SC	0.002	NE	0.002	NE	0.002	NE	0.002	0.001
7440-32-6	22	TI	0.730	NE	0.730	NE	0.730	NE	0.730	0.040
7440-62-2	23	V	0.025	NE	0.025	NE	0.025	NE	0.025	0.003
7440-47-3	24	CR	0.013	NE	0.013	NE	0.013	NE	0.013	0.001
7439-96-5	25	MN	0.051	NE	0.051	NE	0.051	NE	0.051	0.001
7439-89-6	26	FE	6.200	NE	6.200	NE	6.200	NE	6.200	0.300
7440-48-4	27	CO	0.004	NE	0.004	NE	0.004	NE	0.004	0.001
7440-02-0	28	NI	0.009	NE	0.009	NE	0.009	NE	0.009	0.001
7440-50-8	29	CU	<	NE	<	NE	<	NE	<	NR
7440-66-6	30	ZN	0.022	NE	0.022	NE	0.022	NE	0.022	0.002
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	0.006	NE	0.006	NE	0.006	NE	0.006	0.001

continued (profile=43303)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.001	NE	0.001	NE	0.001	NE	0.001	0.001
7726-95-6	35	BR	<	NE	<	NE	<	NE	<	NR
7440-17-7	37	RB	0.013	NE	0.013	NE	0.013	NE	0.013	0.001
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	0.030	NE	0.030	NE	0.030	NE	0.030	0.001
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NE	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	NR
7440-36-0	51	SB	0.001	NE	0.001	NE	0.001	NE	0.001	0.001
7440-46-2	55	CS	0.001	NE	0.001	NE	0.001	NE	0.001	0.001
7440-39-3	56	BA	0.270	NE	0.270	NE	0.270	NE	0.270	0.020
7440-45-1	58	CE	0.015	NE	0.015	NE	0.015	NE	0.015	0.001
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.007	NE	0.007	NE	0.007	NE	0.007	0.001
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	49.244		49.244		49.244		49.244	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.2 CHEMICAL MANUFACTURING

The manufacture of organic and inorganic chemicals involves the production of a wide variety of end-product and intermediate chemicals. Emissions from the chemical manufacturing industry can be high but are usually recovered for economic reasons. The particulate emissions are usually very finely sized and difficult to remove. Emission sources can include storage and handling operations, reactor processes, separation processes, and fugitive and secondary sources.

Profile Name:Charcoal Manufacturing

Profile Number:25302

Profile Data Quality:C/E

Control Device:Uncontrolled

Reference(s):45

Data Source:Average of 2 samples collected with a 2-stage virtual impactor from a Herchoff furnace.

SCC : 30100601

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	1.900	0.300	2.400	0.300	2.230	0.206	2.230	NE
7429-90-5	13	AL	7.000	1.000	10.200	0.800	9.113	0.736	9.113	NE
7440-21-3	14	SI	15.000	1.000	21.000	10	18.962	NE	18.962	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	3.100	0.300	0.800	0.100	1.581	0.188	1.581	NE
7782-50-5	17	CL	5.000	0.600	0.900	0.600	2.292	0.378	2.292	NE
7440-09-7	19	K	7.400	0.500	3.600	0.600	4.891	0.476	4.891	NE
7440-70-2	20	CA	9.500	0.600	12.900	0.800	11.745	0.841	11.745	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.360	0.090	0.680	NR	0.571	NE	0.571	NE
7440-62-2	23	V	0.028	NR	0.040	0.020	0.036	NE	0.036	NE
7440-47-3	24	CR	0.044	NR	0.050	0.020	0.048	NE	0.048	NE
7439-96-5	25	MN	0.440	0.050	0.420	0.030	0.427	0.035	0.427	NE
7439-89-6	26	FE	6.400	0.400	6.600	0.400	6.532	0.482	6.532	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.054	NR	0.022	NR	0.033	NE	0.033	NE
7440-66-6	30	ZN	0.360	NR	0.140	NR	0.215	NE	0.215	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=25302)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.090	0.030	0.011	NR	0.038	NE	0.038	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.090	0.030	NA	NR	NE	NE	NE	NE
	201	OC	1.800	0.900	1.800	0.900	1.800	0.449	1.800	NE
	202	EC	5.200	0.400	5.200	0.400	5.200	0.402	5.200	NE
	203	SO4	6.500	0.500	0.600	0.100	2.604	0.358	2.604	NE
	204	NO3	0.300	0.200	NA	NR	NE	NE	NE	NE
		SUM =	70.566		67.363		68.451		68.451	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Urea Fertilizer Production

Profile Number:25404

Profile Data Quality:D/E

Control Device:Cyclone and Baghouse

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones at 400 deg C. Cyclone and filter catches analyzed by XRF. Si,P,and S non-quantitative. Rotary kiln emissions at control device exit.

SCC : 30104001

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	NR	NR	NR	NR	NE	NE	NR	NR
7723-14-0	15	P	NR	NR	NR	NR	NE	NE	NR	NR
7704-34-9	16	S	1.300	NR	2.000	NR	1.762	NE	2.600	NR
7782-50-5	17	CL	11.000	NR	7.000	NR	8.358	NE	5.000	NR
7440-09-7	19	K	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-70-2	20	CA	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7439-89-6	26	FE	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-48-4	27	CO	0.050	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-50-8	29	CU	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=25404)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7726-95-6	35	BR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	0.050	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	201	OC	31.000	NR	31.000	NR	31.000	NE	31.000	NR
	202	EC	2.000	NR	2.000	NR	2.000	NE	2.000	NR
	203	SO4	4.000	NR	6.000	NR	5.321	NE	8.000	NR
	204	NO3	0.550	NR	0.550	NR	0.550	NE	0.550	NR
		SUM =	51.400		50.050		50.508		50.700	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Boric Acid Manufacturing

Profile Number:25405

Profile Data Quality:D/E

Control Device:Baghouse

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones, at 400 deg F. Cyclone and filter catches analyzed by XRF. Si, P, S non-quantitative. Average of 2 tests at the outlet of the baghouse.

SCC : 30199999 30199998

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.03	0.07	0.11

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	77.640	NR	77.640	NR	77.640	NE	77.640	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	0.660	NR	0.660	NR	0.660	NE	0.660	NR
7782-50-5	17	CL	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-09-7	19	K	<	NR	<	NR	NE	NE	<	NR
7440-70-2	20	CA	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-50-8	29	CU	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=25405)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-43-9	48	CD	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	201	OC	3.900	NR	3.900	NR	3.900	NE	3.900	NR
	202	EC	0.100	NR	0.100	NR	0.100	NE	0.100	NR
	203	SO4	2.000	NR	2.000	NR	2.000	NE	2.000	NR
	204	NO3	0.550	NR	0.550	NR	0.550	NE	0.550	NR
		SUM =	86.250		86.250		86.250		86.250	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Phosphorous Plant Plume

Profile Number:25407

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):44

Data Source:Collected with low-volume sampler by aircraft.

SCC : 30111299

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.78	0.91	0.94

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NE	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NE	NA	NE	NA	NR
7429-90-5	13	AL	1.250	NE	1.250	NE	1.250	NE	1.250	0.250
7440-21-3	14	SI	2.790	NE	2.790	NE	2.790	NE	2.790	1.540
7723-14-0	15	P	3.400	NE	3.400	NE	3.400	NE	3.400	0.300
7704-34-9	16	S	0.300	NE	0.300	NE	0.300	NE	0.300	0.090
7782-50-5	17	CL	0.040	NE	0.040	NE	0.040	NE	0.040	0.030
7440-09-7	19	K	0.340	NE	0.340	NE	0.340	NE	0.340	0.060
7440-70-2	20	CA	0.940	NE	0.940	NE	0.940	NE	0.940	0.280
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.018	NE	0.018	NE	0.018	NE	0.018	NR
7440-62-2	23	V	<	NE	<	NE	<	NE	<	NR
7440-47-3	24	CR	0.015	NE	0.015	NE	0.015	NE	0.015	NR
7439-96-5	25	MN	<	NE	<	NE	<	NE	<	NR
7439-89-6	26	FE	0.260	NE	0.260	NE	0.260	NE	0.260	0.060
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	<	NE	<	NE	<	NE	<	NR
7440-50-8	29	CU	<	NE	<	NE	<	NE	<	NR
7440-66-6	30	ZN	0.220	NE	0.220	NE	0.220	NE	0.220	0.030
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NE	<	NE	<	NR

continued (profile=25407)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.012	NE	0.012	NE	0.012	NE	0.012	NR
7726-95-6	35	BR	<	NE	<	NE	<	NE	<	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	0.013	NE	0.013	NE	0.013	NE	0.013	0.015
7440-05-3	46	PD	0.021	NE	0.021	NE	0.021	NE	0.021	0.040
7440-22-4	47	AG	0.030	NE	0.030	NE	0.030	NE	0.030	0.060
7440-43-9	48	CD	0.041	NE	0.041	NE	0.041	NE	0.041	0.083
7440-74-6	49	IN	0.090	NE	0.090	NE	0.090	NE	0.090	0.093
7440-31-5	50	SN	0.130	NE	0.130	NE	0.130	NE	0.130	0.110
7440-36-0	51	SB	0.100	NE	0.100	NE	0.100	NE	0.100	0.210
7440-39-3	56	BA	0.700	NE	0.700	NE	0.700	NE	0.700	0.600
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.040	NE	0.040	NE	0.040	NE	0.040	0.030
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	10.750		10.750		10.750		10.750	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.3 FOOD AND AGRICULTURE

This category includes farming operations and meat and crop processing. Processes involved in the production of food and agricultural products include harvesting, refinement, preservation, storage and handling, and packaging. Refinement processes can include cleaning, drying, grinding, mixing, and fermentation. Particulate emissions are the dominant emission type from this source category.

Profile Name:Feed and Grain Handling Dust

Profile Number:21401

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones, at 400 deg F. Cylone and filter catches analyzed by XRF. Si, P, S non-quantitative.

SCC : 30200505 30200506

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.14	0.31	0.49

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	15.000	NR	15.000	NR	15.000	NE	15.000	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	<	NR	<	NR	NE	NE	<	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-70-2	20	CA	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	<	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=21401)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	200	TC	30.000	NR	30.000	NR	30.000	NE	30.000	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	0.550	NR	0.550	NR	0.550	NE	0.550	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	46.750		46.750		46.750		46.750	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.4 PRIMARY METAL PRODUCTION

Primary metal production is the production of metals from unprocessed ore. Processes involved depend on the element of concern. Processes generating particulate emissions in this industry include smelting operations, grinding, sintering, electrolytic processes, refining, and leaching.

Profile Name:Primary Lead Smelting - Ore Concentrate

Profile Number:21102

Profile Data Quality:B/C

Control Device:Uncontrolled

Reference(s):43

Data Source:Proportioning and blending operation. Sampled by dichotomous and low-volume samplers.

SCC : 30301005 30301004 30301011 3030101230301013 30301014

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.82	0.89	0.92

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	1.300	0.200	0.500	0.100	1.213	0.266	0.500	0.100
7440-21-3	14	SI	3.800	0.400	1.800	0.200	3.583	0.663	1.500	0.500
7723-14-0	15	P	0.500	0.100	0.200	0.050	0.467	0.121	0.306	0.031
7704-34-9	16	S	8.000	1.000	4.000	1.000	7.565	1.691	4.000	1.000
7782-50-5	17	CL	1.000	0.100	0.160	0.040	0.909	0.160	0.160	0.040
7440-09-7	19	K	0.880	0.100	0.250	0.030	0.812	0.148	0.373	0.037
7440-70-2	20	CA	2.200	0.220	2.100	0.210	2.189	0.470	3.290	0.329
7440-32-6	22	TI	0.100	0.030	0.100	0.300	0.100	0.269	0.101	0.011
7440-62-2	23	V	<	NR	NR	NR	NE	NE	0.020	NR
7440-47-3	24	CR	0.092	NR	0.107	0.011	0.094	NE	0.179	0.018
7439-96-5	25	MN	0.200	0.030	0.280	0.040	0.209	0.062	0.460	0.046
7439-89-6	26	FE	3.700	0.400	5.300	0.530	3.874	1.007	9.150	0.915
7440-02-0	28	NI	0.040	NR	0.050	NR	0.041	NE	0.091	NR
7440-50-8	29	CU	1.200	0.200	1.600	0.200	1.243	0.357	2.575	0.257
7440-66-6	30	ZN	3.492	0.349	3.817	0.382	3.527	0.799	6.659	0.666
7440-38-2	33	AS	1.340	0.134	0.737	0.074	1.274	0.236	1.097	0.110
7782-49-2	34	SE	0.024	NR	0.021	NR	0.024	NE	0.050	NR
7726-95-6	35	BR	0.200	0.050	0.040	NR	0.183	NE	0.040	0.020
7440-24-6	38	SR	0.056	NR	0.101	0.010	0.061	NE	0.176	0.018
7440-05-3	46	PD	0.044	0.021	0.085	NR	0.048	NE	0.095	NR

continued (profile=21102)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-22-4	47	AG	0.140	0.039	0.159	0.016	0.142	0.046	0.239	0.024
7440-43-9	48	CD	0.788	0.090	0.536	0.054	0.761	0.152	0.834	0.083
7440-74-6	49	IN	0.013	NR	0.011	NR	0.013	NE	NR	NR
7440-31-5	50	SN	0.101	0.064	0.160	0.016	0.107	0.063	0.224	0.022
7440-36-0	51	SB	0.299	0.132	0.717	0.072	0.344	0.166	0.979	0.098
7440-39-3	56	BA	0.172	0.297	0.083	0.021	0.162	0.266	0.185	0.036
7439-97-6	80	HG	0.042	0.014	0.033	NR	0.041	NE	0.047	NR
7439-92-1	82	PB	10.377	1.034	13.786	1.379	10.748	2.663	22.871	2.287
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	40.100		36.733		39.734		56.201	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Ore Concentrate Composite

Profile Number:21103

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):43

Data Source:Fugitive dust from storage and handling. Average of 14 lead material and ore samples each sieved and resuspended.

SCC : 30301005 30301004 30301011 30301012 30301013 30301014

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.69	0.80	0.86

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	4.374	2.914	2.280	2.064	3.960	2.919	2.238	2.073
7440-21-3	14	SI	9.709	6.315	5.627	4.352	8.902	6.284	5.581	4.510
7723-14-0	15	P	0.808	0.159	0.539	0.109	0.755	0.190	0.495	0.121
7704-34-9	16	S	17.067	4.343	12.353	2.980	16.135	4.855	10.715	4.069
7782-50-5	17	CL	0.016	0.049	0.000	0.000	0.013	0.039	0.029	0.183
7440-09-7	19	K	0.895	0.489	0.486	0.533	0.814	0.592	0.441	0.504
7440-70-2	20	CA	2.025	1.218	1.888	1.099	1.998	1.353	1.479	1.239
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.219	0.104	0.172	0.093	0.210	0.116	0.167	0.109
7440-62-2	23	V	0.027	0.013	0.014	0.011	0.024	0.014	0.019	0.000
7440-47-3	24	CR	0.039	0.016	0.031	0.017	0.037	0.020	0.035	0.017
7439-96-5	25	MN	0.296	0.482	0.206	0.305	0.278	0.459	0.211	0.324
7439-89-6	26	FE	6.708	5.077	6.448	5.536	6.657	6.118	7.044	6.466
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.092	0.047	0.102	0.066	0.094	0.067	0.125	0.079
7440-50-8	29	CU	6.588	5.355	7.088	5.705	6.687	6.373	7.312	6.216
7440-66-6	30	ZN	3.561	2.921	4.300	3.241	3.707	3.557	4.647	3.911
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	3.935	2.847	3.679	2.745	3.884	3.231	3.074	3.755

continued (profile=21103)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.030	0.023	0.033	0.021	0.031	0.025	0.022	0.013
7726-95-6	35	BR	0.353	0.237	0.335	0.219	0.349	0.265	0.315	0.299
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.056	0.105	0.063	0.154	0.057	0.150	0.059	0.158
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.600	0.571	0.596	0.370	0.599	0.554	0.610	0.648
7440-43-9	48	CD	0.213	0.183	0.393	0.017	0.249	0.156	0.382	0.190
7440-31-5	50	SN	0.292	0.252	0.385	0.214	0.310	0.271	0.313	0.245
7440-36-0	51	SB	4.593	4.246	4.178	4.316	4.511	4.908	4.723	5.568
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.266	0.449	0.077	0.070	0.229	0.366	0.113	0.071
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	0.026	0.020	0.026	0.023	0.026	0.025	0.034	0.039
7439-92-1	82	PB	24.865	1	25.959	1	25.081	NE	28.996	1
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	87.653		77.258		85.597		79.179	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting Materials Handling - Composite

Profile Number:21150

Profile Data Quality:D

Control Device:Uncontrolled

Reference(s):43

Data Source:Developed from profiles 21102,21103, and 21206.

SCC : 30330111 30301004 30301011 3030101230301013 30301014

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.73	0.83	0.88

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7429-90-5	13	AL	2.062	1.687	0.945	1.193	1.871	1.735	0.933	1.198
7440-21-3	14	SI	4.871	3.654	2.543	2.515	4.474	3.736	2.418	2.620
7723-14-0	15	P	0.462	0.110	0.251	0.069	0.426	0.124	0.267	0.072
7704-34-9	16	S	8.953	2.577	5.550	1.815	8.373	2.892	4.977	2.419
7782-50-5	17	CL	0.427	0.074	0.061	0.023	0.365	0.082	0.063	0.108
7440-09-7	19	K	0.672	0.289	0.258	0.308	0.601	0.361	0.276	0.292
7440-70-2	20	CA	1.546	0.715	1.383	0.646	1.518	0.836	1.636	0.740
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.113	0.062	0.091	0.181	0.109	0.160	0.089	0.063
7440-62-2	23	V	0.013	0.008	0.005	0.006	0.012	0.008	0.013	0.000
7440-47-3	24	CR	0.044	0.009	0.046	0.012	0.044	0.014	0.071	0.014
7439-96-5	25	MN	0.172	0.279	0.162	0.178	0.171	0.276	0.224	0.189
7439-89-6	26	FE	3.581	2.940	3.976	3.211	3.649	3.666	5.467	3.770
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.044	0.027	0.051	0.038	0.045	0.040	0.072	0.046
7440-50-8	29	CU	2.642	3.094	2.923	3.296	2.690	3.778	3.323	3.592
7440-66-6	30	ZN	2.590	1.699	2.783	1.884	2.623	2.151	3.845	2.291
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	1.815	1.646	1.502	1.585	1.761	1.916	1.411	2.169

continued (profile=21150)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.018	0.013	0.018	0.012	0.018	0.015	0.024	0.008
7726-95-6	35	BR	0.215	0.140	0.129	0.126	0.201	0.159	0.118	0.173
7440-17-7	37	RB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-24-6	38	SR	0.037	0.061	0.055	0.089	0.040	0.090	0.078	0.092
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-05-3	46	PD	0.015	0.012	0.028	0.000	0.017	0.011	0.032	0.000
7440-22-4	47	AG	0.247	0.332	0.252	0.214	0.248	0.330	0.283	0.374
7440-43-9	48	CD	0.496	0.134	0.333	0.034	0.468	0.134	0.424	0.120
7440-74-6	49	IN	0.004	0.000	0.004	0.000	0.004	0.001	0.000	0.000
7440-31-5	50	SN	0.137	0.162	0.185	0.124	0.145	0.171	0.184	0.142
7440-36-0	51	SB	1.631	2.455	1.647	2.492	1.633	2.915	1.901	3.215
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.146	0.422	0.066	0.059	0.132	0.354	0.099	0.048
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.023	0.016	0.020	0.013	0.022	0.018	0.027	0.023
7439-92-1	82	PB	12.471	8.682	13.529	9.732	12.652	11.032	17.560	9.732
	201	OC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	202	EC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	203	SO4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		SUM =	45.447		38.796		44.312		45.815	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Speiss Fugitive Dust

Profile Number:21205

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):43

Data Source:Speiss fugitive dust.

SCC : 30301009

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.69	0.80	0.86

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.735	0.073	0.735	0.073	0.735	0.144	0.735	0.073
7440-21-3	14	SI	2.613	0.261	2.613	0.261	2.613	0.513	2.613	0.261
7723-14-0	15	P	0.233	0.023	0.233	0.023	0.233	0.046	0.233	0.023
7704-34-9	16	S	3.716	0.734	3.716	0.734	3.716	1.024	3.716	0.734
7782-50-5	17	CL	0.000	0.048	0.000	0.048	0.000	0.054	0.000	0.048
7440-09-7	19	K	0.074	0.000	0.074	0.000	0.074	0.012	0.074	0.000
7440-70-2	20	CA	1.289	0.129	1.289	0.129	1.289	0.253	1.289	0.129
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.077	0.000	0.077	0.000	0.077	0.012	0.077	0.000
7440-62-2	23	V	0.011	0.000	0.011	0.000	0.011	0.002	0.011	0.000
7440-47-3	24	CR	0.022	0.000	0.022	0.000	0.022	0.004	0.022	0.000
7439-96-5	25	MN	0.036	0.000	0.036	0.000	0.036	0.006	0.036	0.000
7439-89-6	26	FE	2.366	0.237	2.366	0.237	2.366	0.465	2.366	0.237
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.755	0.075	0.755	0.075	0.755	0.148	0.755	0.075
7440-50-8	29	CU	37.919	3.792	37.919	3.792	37.919	7.452	37.919	3.792
7440-66-6	30	ZN	1.109	0.111	1.109	0.111	1.109	0.218	1.109	0.111
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	6.460	0.646	6.460	0.646	6.460	1.270	6.460	0.646

continued (profile=21205)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.040	0.000	0.040	0.000	0.040	0.006	0.040	0.000
7726-95-6	35	BR	0.596	0.060	0.596	0.060	0.596	0.117	0.596	0.060
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.011	0.000	0.011	0.000	0.011	0.002	0.011	0.000
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.526	0.053	0.526	0.053	0.526	0.104	0.526	0.053
7440-43-9	48	CD	0.339	0.034	0.339	0.034	0.339	0.067	0.339	0.034
7440-31-5	50	SN	0.649	0.065	0.649	0.065	0.649	0.128	0.649	0.065
7440-36-0	51	SB	3.641	0.364	3.641	0.364	3.641	0.715	3.641	0.364
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.038	0.025	0.038	0.025	0.038	0.029	0.038	0.025
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	0.024	0.000	0.024	0.000	0.024	0.004	0.024	0.000
7439-92-1	82	PB	17.880	1.788	17.880	1.788	17.880	3.514	17.880	1.788
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	81.159		81.159		81.159		81.159	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Soda Flux Fugative Dust

Profile Number:21206

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):43

Data Source:Soda flux fugitive dust.

SCC : 30301005 30301004 30301011 30301012 30301013 30301014

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.69	0.80	0.86

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.511	0.103	0.055	0.014	0.421	0.102	0.062	0.000
7440-21-3	14	SI	1.105	0.139	0.201	0.020	0.926	0.170	0.174	0.017
7723-14-0	15	P	0.079	0.030	0.013	0.000	0.066	0.026	0.000	0.000
7704-34-9	16	S	1.792	0.261	0.298	0.047	1.497	0.296	0.215	0.036
7782-50-5	17	CL	0.266	0.065	0.022	0.000	0.218	0.060	0.000	0.000
7440-09-7	19	K	0.240	0.042	0.038	0.000	0.200	0.044	0.014	0.000
7440-70-2	20	CA	0.414	0.053	0.161	0.016	0.364	0.067	0.139	0.014
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.019	0.000	0.000	0.000	0.015	0.002	0.000	0.000
7440-62-2	23	V	0.013	0.000	0.000	0.000	0.010	0.001	0.000	0.000
7440-47-3	24	CR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-96-5	25	MN	0.021	0.000	0.000	0.000	0.017	0.002	0.000	0.000
7439-89-6	26	FE	0.336	0.049	0.180	0.018	0.305	0.060	0.206	0.021
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-50-8	29	CU	0.137	0.020	0.080	0.000	0.126	0.024	0.082	0.000
7440-66-6	30	ZN	0.717	0.082	0.233	0.023	0.621	0.109	0.229	0.023
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	0.169	0.049	0.090	0.011	0.153	0.046	0.063	0.000

continued (profile=21206)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	0.093	0.015	0.011	0.000	0.077	0.016	0.000	0.000
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.000	0.012	0.000	0.000	0.000	0.010	0.000	0.000
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.000	0.055	0.000	0.000	0.000	0.044	0.000	0.000
7440-43-9	48	CD	0.487	0.109	0.070	0.014	0.405	0.104	0.055	0.000
7440-31-5	50	SN	0.017	0.105	0.011	0.014	0.016	0.085	0.014	0.000
7440-36-0	51	SB	0.000	0.191	0.046	0.028	0.009	0.155	0.000	0.011
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.000	0.495	0.038	0.072	0.008	0.401	0.000	0.023
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	0.000	0.014	0.000	0.000	0.000	0.011	0.000	0.000
7439-92-1	82	PB	2.172	0.243	0.841	0.084	1.909	0.335	0.813	0.081
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	8.588		2.388		7.363		2.066	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Copper Ore Crushing

Profile Number:21301

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):44

Data Source:Fugitive dust. Bulk sample sieved and resuspended.

SCC : 30302401

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	18.798	1.880	13.899	1.390	15.340	1.191	15.340	NE
7440-21-3	14	SI	42.046	4.205	31.945	3.194	34.916	2.690	34.916	NE
7723-14-0	15	P	0.541	0.054	0.258	0.026	0.341	0.031	0.341	NE
7704-34-9	16	S	1.600	0.172	1.149	0.115	1.282	0.102	1.282	NE
7782-50-5	17	CL	0.122	0.035	0.102	0.010	0.108	0.013	0.108	NE
7440-09-7	19	K	3.942	0.394	3.662	0.366	3.744	0.274	3.744	NE
7440-70-2	20	CA	0.881	0.088	0.717	0.072	0.765	0.058	0.765	NE
7440-32-6	22	TI	0.311	0.031	0.390	0.039	0.367	0.025	0.367	NE
7440-62-2	23	V	0.046	NR	0.032	NR	0.036	NE	0.036	NE
7440-47-3	24	CR	0.030	NR	0.021	NR	0.024	NE	0.024	NE
7439-96-5	25	MN	0.087	NR	0.102	0.010	0.098	NE	0.098	NE
7439-89-6	26	FE	4.359	0.436	4.062	0.406	4.149	0.304	4.149	NE
7440-02-0	28	NI	0.012	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	1.009	0.101	1.063	0.106	1.047	0.075	1.047	NE
7440-66-6	30	ZN	0.212	0.022	0.233	0.023	0.227	0.016	0.227	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.018	0.016	0.033	NR	0.029	NE	0.029	NE
7782-49-2	34	SE	0.013	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	0.021	NR	NE	NE	NE	NE

continued (profile=21301)

CAS	Species No.	Species	0-2.5 um(a) % wt.	 Unc.	2.5-10 um(a) % wt.	 Unc.	0-10 um(b) % wt	 Unc.	Total Particulate Measured(c) % wt.	 Unc.
7440-24-6	38	SR	0.041	NR	0.034	NR	0.036	NE	0.036	NE
7440-65-5	39	Y	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7439-98-7	42	MO	<	NR	0.097	NR	NE	NE	NE	NE
7440-05-3	46	PD	<	0.027	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	0.023	0.039	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	0.056	<	NR	NE	NE	NE	NE
7440-74-6	49	IN	0.025	0.059	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	0.072	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	0.127	0.012	0.019	NE	NE	NE	NE
7440-39-3	56	BA	0.656	0.353	0.036	0.048	0.218	0.108	0.218	NE
7439-91-0	57	LA	<	NR	<	0.075	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.214	0.029	0.105	0.010	0.137	0.013	0.137	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	74.986		57.973		62.977		62.977	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Copper Ore Mill Wastepile

Profile Number:21302

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):44

Data Source:Bulk sample sieved and resuspended.

SCC : 30302401

Mass Fraction Data :
  Size interval (um) :   (0-2.5)   (0-6)   (0-10)
  Mass Fraction   :   0.15   0.34   0.51

			0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	Species No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	21.269	2.127	14.655	1.465	16.600	1.316	16.600	NE
7440-21-3	14	SI	40.602	4.060	30.240	3.024	33.288	2.579	33.288	NE
7723-14-0	15	P	0.346	0.035	0.203	0.020	0.245	0.020	0.245	NE
7704-34-9	16	S	1.349	0.135	1.272	0.127	1.295	0.094	1.295	NE
7782-50-5	17	CL	0.111	0.025	0.102	0.010	0.105	0.010	0.105	NE
7440-09-7	19	K	4.353	0.435	3.900	0.390	4.033	0.298	4.033	NE
7440-70-2	20	CA	0.561	0.056	0.757	0.076	0.699	0.048	0.699	NE
7440-32-6	22	TI	0.292	0.029	0.422	0.042	0.384	0.026	0.384	NE
7440-62-2	23	V	0.025	NR	0.030	NR	0.029	NE	0.029	NE
7440-47-3	24	CR	0.028	NR	0.018	NR	0.021	NE	0.021	NE
7439-96-5	25	MN	0.108	0.011	0.112	0.011	0.111	0.008	0.111	NE
7439-89-6	26	FE	3.075	0.307	3.270	0.327	3.213	0.229	3.213	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	1.234	0.123	1.238	0.124	1.237	0.089	1.237	NE
7440-66-6	30	ZN	0.400	0.040	0.496	0.050	0.468	0.033	0.468	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.049	0.013	0.062	NR	0.058	NE	0.058	NE
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	0.022	NR	NE	NE	NE	NE

continued (profile=21302)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-24-6	38	SR	0.026	NR	0.032	NR	0.030	NE	0.030	NE
7440-65-5	39	Y	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7439-98-7	42	MO	<	NR	0.038	NR	NE	NE	NE	NE
7440-05-3	46	PD	<	0.017	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	0.025	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	0.046	0.038	<	NR	NE	NE	NE	NE
7440-74-6	49	IN	<	0.038	0.014	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	0.048	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	0.053	0.088	<	0.014	NE	NE	NE	NE
7440-39-3	56	BA	0.106	0.222	0.066	0.038	0.078	0.066	0.078	NE
7439-91-0	57	LA	<	NR	<	0.061	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.287	0.029	0.202	0.020	0.227	0.018	0.227	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
		SUM =	74.320		57.151		62.204		62.204	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Copper Ore Concentrate

Profile Number:2[illegible]303

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):44

Data Source:Fugitive dust. Bulk sample sieved and resuspended.

SCC : 30302404

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

			0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	Species No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	7.923	0.792	2.648	0.265	4.199	0.426	4.199	NE
7440-21-3	14	SI	15.955	1.595	5.969	0.597	8.906	0.868	8.906	NE
7723-14-0	15	P	0.596	0.060	0.326	0.033	0.405	0.035	0.405	NE
7704-34-9	16	S	12.929	1.293	10.182	1.018	10.990	0.838	10.990	NE
7782-50-5	17	CL	0.020	0.042	<	0.032	NE	NE	NE	NE
7440-09-7	19	K	1.745	0.174	0.887	0.089	1.139	0.100	1.139	NE
7440-70-2	20	CA	0.517	0.052	0.456	0.046	0.474	0.035	0.474	NE
7440-32-6	22	TI	0.239	0.024	0.219	0.022	0.225	0.017	0.225	NE
7440-62-2	23	V	0.039	NR	0.034	NR	0.035	NE	0.035	NE
7440-47-3	24	CR	0.050	NR	0.042	NR	0.044	NE	0.044	NE
7439-96-5	25	MN	0.087	NR	0.069	NR	0.074	NE	0.074	NE
7439-89-6	26	FE	10.355	1.035	12.101	1.210	11.587	0.811	11.587	NE
7440-02-0	28	NI	0.103	0.010	0.109	0.011	0.107	0.008	0.107	NE
7440-50-8	29	CU	21.726	2.173	22.110	2.211	21.997	1.579	21.997	NE
7440-66-6	30	ZN	4.717	0.472	6.446	0.645	5.937	0.407	5.937	NE
7440-55-3	31	GA	NA	NR	0.051	NR	NE	NE	NE	NE
7440-38-2	33	AS	1.016	0.102	0.991	0.099	0.998	0.072	0.998	NE
7782-49-2	34	SE	0.012	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.081	NR	0.081	NR	0.081	NE	0.081	NE
7440-17-7	37	RB	NA	NR	<	NR	NE	NE	NE	NE

continued (profile=21303)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-24-6	38	SR	0.017	NR	0.017	NR	0.017	NE	0.017	NE
7440-65-5	39	Y	NA	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	0.035	NR	NE	NE	NE	NE
7439-98-7	42	MO	NA	NR	0.520	0.052	NE	NE	NE	NE
7440-05-3	46	PD	<	NR	0.020	NR	NE	NE	NE	NE
7440-22-4	47	AG	0.090	0.011	0.063	NR	0.071	NE	0.071	NE
7440-43-9	48	CD	0.043	0.012	0.052	NR	0.049	NE	0.049	NE
7440-74-6	49	IN	0.019	0.012	0.025	NR	0.023	NE	0.023	NE
7440-31-5	50	SN	0.036	0.014	0.051	NR	0.047	NE	0.047	NE
7440-36-0	51	SB	0.094	0.026	0.073	NR	0.079	NE	0.079	NE
7440-39-3	56	BA	<	0.068	<	0.015	NE	NE	NE	NE
7439-91-0	57	LA	NA	NR	<	0.023	NE	NE	NE	NE
7439-97-6	80	HG	0.020	NR	0.022	NR	0.021	NE	0.021	NE
7439-92-1	82	PB	1.082	0.108	1.023	0.102	1.040	0.076	1.040	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	79.511		64.622		68.997		68.997	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Copper Mining Waste

Profile Number:21304

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):44

Data Source:Bulk sample sieved and resuspended.

SCC : 30302404

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	11.447	1.145	9.769	0.977	10.263	0.767	10.263	NE
7440-21-3	14	SI	25.023	2.502	24.576	2.458	24.707	1.787	24.707	NE
7723-14-0	15	P	0.556	0.056	0.310	0.031	0.382	0.032	0.382	NE
7704-34-9	16	S	4.944	0.494	2.691	0.269	3.354	0.287	3.354	NE
7782-50-5	17	CL	0.097	0.035	0.096	0.013	0.096	0.012	0.096	NE
7440-09-7	19	K	2.304	0.230	2.093	0.209	2.155	0.158	2.155	NE
7440-70-2	20	CA	1.087	0.109	1.937	0.194	1.687	0.113	1.687	NE
7440-32-6	22	TI	0.403	0.040	0.519	0.052	0.485	0.033	0.485	NE
7440-62-2	23	V	0.044	NR	0.035	NR	0.038	NE	0.038	NE
7440-47-3	24	CR	0.052	NR	0.036	NR	0.041	NE	0.041	NE
7439-96-5	25	MN	0.089	NR	0.108	0.011	0.102	NE	0.102	NE
7439-89-6	26	FE	14.384	1.438	9.106	0.911	10.658	0.867	10.658	NE
7440-02-0	28	NI	0.014	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.353	0.035	0.272	NR	0.296	NE	0.296	NE
7440-66-6	30	ZN	0.650	0.065	0.696	0.027	0.682	0.045	0.682	NE
7440-55-3	31	GA	NA	NA	<	0.070	NE	NE	NE	NE
7440-38-2	33	AS	0.051	0.025	0.043	NR	0.045	NE	0.045	NE
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.018	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	NA	NR	0.014	NR	NE	NE	NE	NE

continued (profile=21304)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-24-6	38	SR	<	NR	0.019	NR	NE	NE	NE	NE
7440-65-5	39	Y	NA	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	0.016	NR	NE	NE	NE	NE
7439-98-7	42	MO	NA	NR	0.014	NR	NE	NE	NE	NE
7440-05-3	46	PD	<	0.021	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	0.016	0.030	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	0.031	0.044	<	NR	NE	NE	NE	NE
7440-74-6	49	IN	<	0.047	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	0.050	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	0.169	0.095	0.046	0.017	0.082	0.029	0.082	NE
7440-39-3	56	BA	<	0.269	<	0.046	NE	NE	NE	NE
7439-91-0	57	LA	NA	NR	<	0.069	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	1.197	0.120	0.633	0.063	0.799	0.069	0.799	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	62.929		53.029		55.939		55.939	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Copper Ore - Composite

Profile Number:21320

Profile Data Quality:E

Control Device:Uncontrolled

Reference(s):44

Data Source:Developed from profiles 21301 and 21302.

SCC : 30302401

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7782-41-4	9	F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-23-5	11	NA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7439-95-4	12	MG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7429-90-5	13	AL	20.033	2.007	14.277	1.428	15.970	1.254	15.970	NE
7440-21-3	14	SI	41.324	4.133	31.093	3.110	34.102	2.635	34.102	NE
7723-14-0	15	P	0.444	0.046	0.231	0.023	0.293	0.026	0.293	NE
7704-34-9	16	S	1.474	0.155	1.211	0.121	1.288	0.098	1.288	NE
7782-50-5	17	CL	0.116	0.030	0.102	0.010	0.106	0.011	0.106	NE
7440-09-7	19	K	4.147	0.415	3.781	0.378	3.889	0.286	3.889	NE
7440-70-2	20	CA	0.721	0.074	0.737	0.074	0.732	0.053	0.732	NE
7440-32-6	22	TI	0.301	0.030	0.406	0.041	0.375	0.026	0.375	NE
7440-62-2	23	V	0.036	0.000	0.031	0.000	0.032	0.002	0.032	NE
7440-47-3	24	CR	0.029	0.000	0.019	0.000	0.022	0.001	0.022	NE
7439-96-5	25	MN	0.098	0.008	0.107	0.011	0.104	0.007	0.104	NE
7439-89-6	26	FE	3.717	0.377	3.666	0.369	3.681	0.267	3.681	NE
7440-02-0	28	NI	0.006	0.000	0.000	0.000	0.002	0.000	0.002	NE
7440-50-8	29	CU	1.121	0.113	1.151	0.115	1.142	0.082	1.142	NE
7440-66-6	30	ZN	0.306	0.032	0.364	0.039	0.347	0.025	0.347	NE
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-38-2	33	AS	0.034	0.015	0.048	0.000	0.043	0.005	0.043	NE
7782-49-2	34	SE	0.006	0.000	0.000	0.000	0.002	0.000	0.002	NE
7726-95-6	35	BR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-17-7	37	RB	0.000	0.000	0.021	0.000	0.015	0.001	0.015	NE

continued (profile=21320)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-24-6	38	SR	0.034	0.000	0.033	0.000	0.033	0.002	0.033	NE
7440-65-5	39	Y	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7439-98-7	42	MO	0.000	0.000	0.068	0.000	0.048	0.003	0.048	NE
7440-05-3	46	PD	0.000	0.023	0.000	0.000	0.000	0.007	0.000	NE
7440-22-4	47	AG	0.011	0.033	0.000	0.000	0.003	0.010	0.003	NE
7440-43-9	48	CD	0.023	0.048	0.000	0.000	0.007	0.014	0.007	NE
7440-74-6	49	IN	0.013	0.050	0.007	0.000	0.009	0.015	0.009	NE
7440-31-5	50	SN	0.000	0.061	0.000	0.000	0.000	0.018	0.000	NE
7440-36-0	51	SB	0.026	0.109	0.006	0.017	0.012	0.033	0.012	NE
7440-39-3	56	BA	0.381	0.295	0.051	0.043	0.148	0.089	0.148	NE
7439-91-0	57	LA	0.000	0.000	0.000	0.068	0.000	0.020	0.000	NE
7439-97-6	80	HG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7439-92-1	82	PB	0.251	0.029	0.153	0.016	0.182	0.016	0.182	NE
	201	OC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
	202	EC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
	203	SO4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
	204	SO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
		SUM =	74.652		57.563		62.587		62.587	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Composite of Copper Ore Concentrate and Mining Waste

Profile Number:21340

Profile Data Quality:E

Control Device:Uncontrolled

Reference(s):44

Data Source:Developed from profiles 21303 and 21304.

SCC : 30302404

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-42-3	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7782-41-4	9	F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-23-5	11	NA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7439-95-4	12	MG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7429-90-5	13	AL	9.685	0.984	6.208	0.716	7.231	0.598	7.231	NE
7440-21-3	14	SI	20.489	2.098	15.273	1.789	16.807	1.337	16.807	NE
7723-14-0	15	P	0.576	0.058	0.318	0.032	0.394	0.034	0.394	NE
7704-34-9	16	S	8.937	0.979	6.437	0.745	7.172	0.584	7.172	NE
7782-50-5	17	CL	0.059	0.039	0.048	0.024	0.051	0.014	0.051	NE
7440-09-7	19	K	2.024	0.204	1.490	0.161	1.647	0.129	1.647	NE
7440-70-2	20	CA	0.802	0.085	1.197	0.141	1.080	0.077	1.080	NE
7440-32-6	22	TI	0.321	0.033	0.369	0.040	0.355	0.025	0.355	NE
7440-62-2	23	V	0.041	0.000	0.035	0.000	0.037	0.002	0.037	NE
7440-47-3	24	CR	0.051	0.000	0.039	0.000	0.043	0.003	0.043	NE
7439-96-5	25	MN	0.088	0.000	0.088	0.008	0.088	0.006	0.088	NE
7439-89-6	26	FE	12.370	1.253	10.604	1.071	11.123	0.833	11.123	NE
7440-02-0	28	NI	0.058	0.007	0.054	0.008	0.056	0.005	0.056	NE
7440-50-8	29	CU	11.040	1.537	11.191	1.563	11.146	0.918	11.146	NE
7440-66-6	30	ZN	2.683	0.337	3.571	0.456	3.310	0.250	3.310	NE
7440-55-3	31	GA	0.000	0.000	0.025	0.049	0.018	0.015	0.018	NE
7440-38-2	33	AS	0.533	0.074	0.517	0.070	0.522	0.043	0.522	NE
7782-49-2	34	SE	0.006	0.000	0.000	0.000	0.002	0.000	0.002	NE
7726-95-6	35	BR	0.050	0.000	0.041	0.000	0.043	0.003	0.043	NE
7440-17-7	37	RB	0.000	0.000	0.007	0.000	0.005	0.000	0.005	NE

continued (profile=21340)

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-24-6	38	SR	0.009	0.000	0.018	0.000	0.015	0.001	0.015	NE
7440-65-5	39	Y	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
7440-67-7	40	ZR	0.000	0.000	0.026	0.000	0.018	0.001	0.018	NE
7439-98-7	42	MO	0.000	0.000	0.267	0.037	0.188	0.016	0.188	NE
7440-05-3	46	PD	0.000	0.015	0.010	0.000	0.007	0.004	0.007	NE
7440-22-4	47	AG	0.053	0.023	0.032	0.000	0.038	0.007	0.038	NE
7440-43-9	48	CD	0.037	0.032	0.026	0.000	0.029	0.010	0.029	NE
7440-74-6	49	IN	0.009	0.034	0.013	0.000	0.012	0.010	0.012	NE
7440-31-5	50	SN	0.018	0.037	0.025	0.000	0.023	0.011	0.023	NE
7440-36-0	51	SB	0.132	0.070	0.059	0.012	0.081	0.022	0.081	NE
7440-39-3	56	BA	0.000	0.196	0.000	0.034	0.000	0.059	0.000	NE
7439-91-0	57	LA	0.000	0.000	0.000	0.051	0.000	0.015	0.000	NE
7439-97-6	80	HG	0.010	0.000	0.011	0.000	0.011	0.001	0.011	NE
7439-92-1	82	PB	1.139	0.114	0.828	0.085	0.920	0.072	0.920	NE
	201	OC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
	202	EC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
	203	SO4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
	204	NO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NE
		SUM =	71.220		58.827		62.472		62.472	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Slag dust

Profile Number:21501

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):43

Data Source:Sample is composite of samples from various locations on the pile; sieved and resuspended.

SCC : 30399999

Mass Fraction Data :
  Size interval (um) :   (0-2.5)   (0-6)   (0-10)
  Mass Fraction   :   0.15   0.34   0.51

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	3.744	0.374	2.150	0.215	2.619	0.220	2.349	0.235
7440-21-3	14	SI	18.202	1.820	11.323	1.132	13.346	1.092	12.509	1.251
7723-14-0	15	P	0.352	0.035	0.202	0.020	0.246	0.021	0.183	0.018
7704-34-9	16	S	4.260	0.426	2.237	0.224	2.832	0.245	1.967	0.197
7782-50-5	17	CL	0.229	0.052	0.119	0.025	0.151	0.020	0.112	0.017
7440-09-7	19	K	0.777	0.078	0.570	0.057	0.631	0.049	0.648	0.065
7440-70-2	20	CA	9.313	0.931	7.499	0.750	8.033	0.609	9.245	0.924
7440-32-6	22	TI	0.372	0.037	0.290	0.029	0.314	0.024	0.257	0.026
7440-62-2	23	V	0.092	NR	0.051	NR	0.063	NE	0.044	NR
7440-47-3	24	CR	0.096	NR	0.086	NR	0.089	NE	0.112	0.011
7439-96-5	25	MN	1.168	0.117	0.988	0.099	1.041	0.078	1.278	0.128
7439-89-6	26	FE	16.292	1.629	15.294	1.529	15.588	1.138	21.323	2.132
7440-02-0	28	NI	0.054	NR	0.046	NR	0.048	NE	0.048	NR
7440-50-8	29	CU	1.766	0.177	1.044	0.104	1.256	0.105	1.189	0.119
7440-66-6	30	ZN	11.305	1.130	7.296	0.730	8.475	0.685	9.203	0.920
7440-38-2	33	AS	0.634	0.068	0.357	0.036	0.438	0.038	0.325	0.032
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.065	NR	0.031	NR	0.041	NE	0.034	NR
7440-24-6	38	SR	0.182	0.018	0.150	0.015	0.159	0.012	0.195	0.019
7440-05-3	46	PD	<	0.020	<	NR	NE	NE	0.018	NR

continued (profile=21501)

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-22-4	47	AG	0.033	0.028	<	0.012	NE	NE	0.018	NR
7440-43-9	48	CD	0.050	0.043	0.037	0.020	0.041	0.014	0.055	NR
7440-74-6	49	IN	0.053	0.047	<	0.018	NE	NE	<	NR
7440-31-5	50	SN	<	0.055	0.094	0.023	NE	NE	0.062	NR
7440-36-0	51	SB	0.244	0.108	0.069	0.042	0.120	0.036	0.202	0.021
7440-39-3	56	BA	0.084	0.269	0.194	0.109	0.162	0.086	0.353	0.042
7439-97-6	80	HG	0.023	0.011	0.014	NR	0.017	NE	0.014	NR
7439-92-1	82	PB	6.114	0.611	3.159	0.316	4.028	0.351	3.500	0.350
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	75.504		53.300		59.830		65.243	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Steel Production - Steel Sinter Plant

Profile Number:28301

Profile Data Quality:D/D

Control Device:Baghouse

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones at 400 deg F. Cyclone and filter catches analyzed by XRF. Si, P, S non-quantitative. Average of 2 tests downstream of baghouse.

SCC : 30300813

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.27	0.60	0.69

									Total Particulate	
	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	NR	NR	NR	NR	NE	NE	NR	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	6.600	NR	2.600	NR	4.165	NE	6.330	NR
7782-50-5	17	CL	17.000	NR	14.000	NR	15.174	NE	28.000	NR
7440-09-7	19	K	20.000	NR	9.000	NR	13.304	NE	19.000	NR
7440-70-2	20	CA	0.550	NR	1.000	NR	0.824	NE	0.550	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	0.550	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	3.000	NR	0.550	NR	1.509	NE	3.000	NR
7439-96-5	25	MN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-89-6	26	FE	13.000	NR	20.000	NR	17.261	NE	14.000	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.550	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	2.000	NR	2.000	NR	2.000	NE	2.000	NR
7440-66-6	30	ZN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	0.550	NR	0.550	NR	0.550	NE	0.550	NR

continued (profile=28301)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7726-95-6	35	BR	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-17-7	37	RB	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-24-6	38	SR	0.050	NR	<	NR	NE	NE	0.050	NR
7440-67-7	40	ZR	0.050	NR	<	NR	NE	NE	0.050	NR
7440-22-4	47	AG	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-43-9	48	CD	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-31-5	50	SN	0.050	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	0.050	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	11.000	NR	13.000	NR	12.217	NE	10.000	NR
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	20.000	NR	8.000	NR	12.696	NE	19.000	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	98.400		74.100		83.610		105.930	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Steel Production - Open Hearth Furnace

Profile Number:28302

Profile Data Quality:D/E

Control Device:ESP

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones at 400 deg F. Cyclone and filter catches by XRF. Si, P, S non-quantitative. Average of 2 tests downstream of ESP. S is estimated at 1/3 of SO4.

SCC : 30300901

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.39	0.50	0.53

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	NR	NR	NR	NR	NE	NE	NR	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	13.300	NR	3.000	NR	10.579	NE	13.300	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	5.000	NR	5.000	NR	5.000	NE	5.000	NR
7440-70-2	20	CA	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-47-3	24	CR	2.000	NR	0.550	NR	1.617	NE	2.000	NR
7439-96-5	25	MN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-89-6	26	FE	11.000	NR	16.000	NR	12.321	NE	11.000	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-50-8	29	CU	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	<	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	0.050	NR	0.050	NR	0.050	NE	0.050	NR

continued (profile=28302)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-17-7	37	RB	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-43-9	48	CD	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-31-5	50	SN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-36-0	51	SB	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.550	NR	0.550	NR	0.550	NE	0.550	NR
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	40.000	NR	35.000	NR	38.679	NE	40.000	NR
	204	NO3	0.550	NR	0.550	NR	0.550	NE	0.550	NR
		SUM =	75.500		63.750		72.396		75.500	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Steel Production - Basic Oxygen Furnace

Profile Number:28303

Profile Data Quality:D/E

Control Device:ESP

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones at 400 deg F. Cyclone and filter catches analyzed by XRF. Si, P, S non-quantitative. S estimated as 1/3 of SO4.

SCC : 30300913

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.65	0.66	0.67

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	9.900	NR	9.900	NR	9.900	NE	9.900	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	13.330	NR	13.330	NR	13.330	NE	13.330	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	5.000	NR	5.000	NR	5.000	NE	5.000	NR
7440-70-2	20	CA	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-47-3	24	CR	2.000	NR	2.000	NR	2.000	NE	2.000	NR
7439-96-5	25	MN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-89-6	26	FE	11.000	NR	11.000	NR	11.000	NE	11.000	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-50-8	29	CU	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	<	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	0.050	NR	0.050	NR	0.050	NE	0.050	NR

continued (profile=28303)

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-17-7	37	RB	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-43-9	48	CD	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-31-5	50	SN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-36-0	51	SB	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.550	NR	0.550	NR	0.550	NE	0.550	NR
	201	OC	20.000	NR	20.000	NR	20.000	NE	20.000	NR
	202	EC	<	NR	<	NR	NE	NE	<	NR
	203	SO4	40.000	NR	40.000	NR	40.000	NE	40.000	NR
	204	NO3	0.550	NR	0.550	NR	0.550	NE	0.550	NR
		SUM =	105.430		105.430		105.430		105.430	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Ferromanganese Furnace

Profile Number:28401

Profile Data Quality:B/C

Control Device:Baghouse

Reference(s):46

Data Source:Sampled with a 2-stage virtual impactor with a Method 5 heated probe. No dilution air. Analysis by INAA, IC, and carbon oxidation. Average of 2 samples from one source.

SCC : 30300701

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.49	0.67	0.83

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	0.290	0.080	0.290	0.080	0.290	0.075	0.290	NE
7440-23-5	11	NA	3.100	0.300	3.100	0.300	3.100	0.444	3.100	NE
7439-95-4	12	MG	<	4.000	<	4.000	NE	NE	NE	NE
7429-90-5	13	AL	0.640	0.130	0.640	0.130	0.640	0.132	0.640	NE
7440-21-3	14	SI	0.990	0.300	0.990	0.300	0.990	0.276	0.990	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	1.700	0.350	1.700	0.350	1.700	0.355	1.700	NE
7782-50-5	17	CL	0.420	0.160	0.420	0.160	0.420	0.142	0.420	NE
7440-09-7	19	K	10.500	3.900	10.500	3.900	10.500	3.484	10.500	NE
7440-70-2	20	CA	1.300	0.140	1.300	0.140	1.300	0.193	1.300	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.046	0.007	0.046	0.007	0.046	0.008	0.046	NE
7440-62-2	23	V	0.024	0.019	0.024	0.019	0.024	0.016	0.024	NE
7440-47-3	24	CR	0.042	0.003	0.042	0.003	0.042	0.006	0.042	NE
7439-96-5	25	MN	17.300	0.990	17.300	0.990	17.300	2.204	17.300	NE
7439-89-6	26	FE	2.100	1.400	2.100	1.400	2.100	1.195	2.100	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	0.005	<	0.005	NE	NE	NE	NE
7440-50-8	29	CU	0.036	0.004	0.036	0.004	0.036	0.005	0.036	NE
7440-66-6	30	ZN	0.580	0.250	0.580	0.250	0.580	0.220	0.580	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=28401)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.160	0.220	0.160	0.220	0.160	0.185	0.160	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.045	0.016	0.045	0.016	0.045	0.014	0.045	NE
	201	OC	9.000	0.090	9.000	0.090	9.000	1.065	9.000	NE
	202	EC	1.500	0.150	1.500	0.150	1.500	0.217	1.500	NE
	203	SO4	4.200	0.400	4.200	0.400	4.200	0.598	4.200	NE
	204	NO3	5.700	2.800	5.700	2.800	5.700	2.433	5.700	NE
		SUM =	59.673		59.673		59.673		59.673	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Aluminum Processing

Profile Number:29101

Profile Data Quality:B/D

Control Device:Baghouse

Reference(s):46,54

Data Source:Sampled with a 2-stage virtual impactor with a Method 5 heated probe. No dilution air. Analysis by XRF, INNA, IC, and carbon oxidation. Average of 3 samples from 2 plants. Sampled downstream of baghouse.

SCC : 30300107

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.40	0.52	0.58

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	6.000	2.300	4.200	1.900	5.441	2.178	5.441	NE
7440-23-5	11	NA	4.100	1.700	2.400	0.600	3.572	1.327	3.572	NE
7439-95-4	12	MG	2.800	1.800	2.700	0.550	2.769	1.352	2.769	NE
7429-90-5	13	AL	27.000	8.000	31.300	4.900	28.334	7.623	28.334	NE
7440-21-3	14	SI	0.340	0.340	0.097	0.080	0.265	0.243	0.265	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	1.400	0.200	<	0.300	NE	NE	NE	NE
7782-50-5	17	CL	1.330	0.840	1.200	0.150	1.290	0.614	1.290	NE
7440-09-7	19	K	0.220	0.060	<	0.100	NE	NE	NE	NE
7440-70-2	20	CA	0.330	0.030	0.810	0.340	0.479	0.250	0.479	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.040	0.030	0.076	0.041	0.051	0.036	0.051	NE
7440-62-2	23	V	0.064	0.036	0.040	0.011	0.057	0.027	0.057	NE
7440-47-3	24	CR	<	0.010	0.016	0.018	NE	NE	NE	NE
7439-96-5	25	MN	0.011	0.008	<	0.020	NE	NE	NE	NE
7439-89-6	26	FE	0.450	0.290	0.380	0.150	0.428	0.232	0.428	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.190	0.085	0.210	0.060	0.196	0.077	0.196	NE
7440-50-8	29	CU	0.044	0.007	0.140	0.040	0.074	0.031	0.074	NE
7440-66-6	30	ZN	0.015	0.011	0.009	0.004	0.013	0.008	0.013	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=29101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.037	0.054	0.120	0.200	0.063	0.143	0.063	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.012	0.010	<	0.100	NE	NE	NE	NE
	201	OC	3.900	3.900	<	2.000	NE	NE	NE	NE
	202	EC	2.300	1.000	1.600	1.500	2.083	1.273	2.083	NE
	203	SO4	4.400	3.900	1.700	1.100	3.562	2.832	3.562	NE
	204	NO3	0.410	0.180	NA	2.000	NE	NE	NE	NE
		SUM =	55.393		46.998		52.789		52.789	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Aluminum Reduction Potline

Profile Number:29102

Profile Data Quality:B/D

Control Device:Uncontrolled

Reference(s):49

Data Source:Sampled with a 2-stage virtual impactor. Average from 2 roof vents.

SCC : 30300107

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.40	0.52	0.58

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	<	NR	<	NE	<	NE	NA	NR
7440-42-8	5	B	0.190	0.020	0.190	NE	0.190	NE	NA	NR
7782-41-4	9	F	13.500	5.900	13.500	NE	13.500	NE	15.454	3.387
7440-23-5	11	NA	14.900	1.700	14.900	NE	14.900	NE	NA	NR
7439-95-4	12	MG	0.055	0.006	0.055	NE	0.055	NE	NA	NR
7429-90-5	13	AL	15.200	1.700	15.200	NE	15.200	NE	15.926	1.657
7440-21-3	14	SI	0.340	0.040	0.340	NE	0.340	NE	0.398	0.047
7723-14-0	15	P	0.030	0.030	0.030	NE	0.030	NE	0.042	0.019
7704-34-9	16	S	5.000	3.800	5.000	NE	5.000	NE	3.908	2.065
7782-50-5	17	CL	0.800	0.160	0.800	NE	0.800	NE	0.834	0.338
7440-09-7	19	K	0.527	0.470	0.527	NE	0.527	NE	0.358	0.254
7440-70-2	20	CA	0.100	0.140	0.100	NE	0.100	NE	0.414	0.083
7440-32-6	22	TI	0.002	NR	0.002	NE	0.002	NE	0.015	0.002
7440-62-2	23	V	0.015	0.004	0.015	NE	0.015	NE	0.073	0.013
7439-96-5	25	MN	0.008	0.011	0.008	NE	0.008	NE	0.004	0.006
7439-89-6	26	FE	0.114	0.095	0.114	NE	0.114	NE	0.812	0.281
7440-48-4	27	CO	0.002	0.002	0.002	NE	0.002	NE	NA	NR
7440-02-0	28	NI	0.014	0.008	0.014	NE	0.014	NE	0.288	0.078
7440-50-8	29	CU	0.018	0.008	0.018	NE	0.018	NE	0.078	0.011
7440-66-6	30	ZN	0.007	0.001	0.007	NE	0.007	NE	0.006	0.003
7440-55-3	31	GA	0.028	0.018	0.028	NE	0.028	NE	0.050	0.014
7440-38-2	33	AS	0.022	0.014	0.022	NE	0.022	NE	0.018	0.008
7782-49-2	34	SE	0.003	NR	0.003	NE	0.003	NE	0.002	NR
7726-95-6	35	BR	0.022	0.008	0.022	NE	0.022	NE	0.016	0.004
7440-17-7	37	RB	0.005	0.001	0.005	NE	0.005	NE	0.004	NR

continued (profile=29102)

	Species	Species	0-2.5 um(a)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-24-6	38	SR	<	NR	<	NE	<	NE	0.003	NR
7440-67-7	40	ZR	<	NR	<	NE	<	NE	<	NR
7439-98-7	42	MO	0.006	0.006	0.006	NE	0.006	NE	0.012	0.005
7440-05-3	46	PD	<	NR	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NR	<	NE	<	NE	<	NR
7440-43-9	48	CD	0.003	0.001	0.003	NE	0.003	NE	0.002	0.001
7440-74-6	49	IN	<	NR	<	NE	<	NE	<	NR
7440-31-5	50	SN	<	NR	<	NE	<	NE	<	NR
7440-36-0	51	SB	0.001	0.003	0.001	NE	0.001	NE	0.001	0.002
7440-39-3	56	BA	0.001	NR	0.001	NE	0.001	NE	0.002	0.001
7439-91-0	57	LA	0.004	0.004	0.004	NE	0.004	NE	0.004	0.003
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.072	0.026	0.072	NE	0.072	NE	0.053	0.014
7440-69-9	83	BI	0.030	0.030	0.030	NE	0.030	NE	NA	NR
	200	TC	NA	NR	NA	NE	NA	NE	NA	NR
	201	OC	28.200	5.000	28.200	NE	28.200	NE	22.180	3.032
	202	EC	2.680	0.320	2.680	NE	2.680	NE	15.247	2.765
	203	SO4	17.411	9.300	17.411	NE	17.411	NE	12.764	5.043
	204	NO3	0.690	0.130	0.690	NE	0.690	NE	0.593	0.086
		SUM =	100.000		100.000		100.000		89.561	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Copper Smelter

Profile Number:29202

Profile Data Quality:D/E

Control Device:ESP

Reference(s):24

Data Source:Analyzed by XRF/SSMS. 1-2 samples downstream of ESP on a reverberatory furnace.

SCC : 30300503

Mass Fraction Data :

	(0-2.5)	(0-6)	(0-10)
Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.84	0.98	0.99

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	0.007	NR	0.007	NE	0.007	NE	0.007	NE
7440-42-8	5	B	<	NR	<	NE	<	NE	<	NE
7782-41-4	9	F	4.950	NR	4.950	NE	4.950	NE	4.950	NE
7440-23-5	11	NA	<	NR	<	NE	<	NE	<	NE
7439-95-4	12	MG	<	NR	<	NE	<	NE	<	NE
7429-90-5	13	AL	<	NR	<	NE	<	NE	<	NE
7440-21-3	14	SI	<	NR	<	NE	<	NE	<	NE
7723-14-0	15	P	<	NR	<	NE	<	NE	<	NE
7704-34-9	16	S	0.792	NR	0.792	NE	0.792	NE	0.792	NE
7782-50-5	17	CL	<	NR	<	NE	<	NE	<	NE
7440-09-7	19	K	<	NR	<	NE	<	NE	<	NE
7440-70-2	20	CA	<	NR	<	NE	<	NE	<	NE
7440-20-2	21	SC	<	NR	<	NE	<	NE	<	NE
7440-32-6	22	TI	<	NR	<	NE	<	NE	<	NE
7440-62-2	23	V	<	NR	<	NE	<	NE	<	NE
7440-47-3	24	CR	0.007	NR	0.007	NE	0.007	NE	0.007	NE
7439-96-5	25	MN	<	NR	<	NE	<	NE	<	NE
7439-89-6	26	FE	<	NR	<	NE	<	NE	<	NE
7440-48-4	27	CO	<	NR	<	NE	<	NE	<	NE
7440-02-0	28	NI	0.056	NR	0.056	NE	0.056	NE	0.056	NE
7440-50-8	29	CU	0.660	NR	0.660	NE	0.660	NE	0.660	NE
7440-66-6	30	ZN	0.047	NR	0.047	NE	0.047	NE	0.047	NE
7440-55-3	31	GA	<	NR	<	NE	<	NE	<	NE
7440-56-4	32	GE	<	NR	<	NE	<	NE	<	NE
7440-38-2	33	AS	92.449	NR	92.449	NE	92.449	NE	92.449	NE

continued (profile=29202)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	0.640	NR	0.640	NE	0.640	NE	0.640	NE
7726-95-6	35	BR	<	NR	<	NE	<	NE	<	NE
7440-17-7	37	RB	<	NR	<	NE	<	NE	<	NE
7440-24-6	38	SR	<	NR	<	NE	<	NE	<	NE
7440-67-7	40	ZR	<	NR	<	NE	<	NE	<	NE
7440-22-4	47	AG	<	NR	<	NE	<	NE	<	NE
7440-43-9	48	CD	0.010	NR	0.010	NE	0.010	NE	0.010	NE
7440-31-5	50	SN	<	NR	<	NE	<	NE	<	NE
7440-36-0	51	SB	0.217	NR	0.217	NE	0.217	NE	0.217	NE
7440-46-2	55	CS	<	NR	<	NE	<	NE	<	NE
7440-39-3	56	BA	<	NR	<	NE	<	NE	<	NE
7440-45-1	58	CE	<	NR	<	NE	<	NE	<	NE
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NE
7439-92-1	82	PB	0.049	NR	0.049	NE	0.049	NE	0.049	NE
	201	OC	NA	NR	NA	NE	NA	NE	NA	NE
	202	EC	NA	NR	NA	NE	NA	NE	NA	NE
	203	SO4	NA	NR	NA	NE	NA	NE	NA	NE
	204	NO3	NA	NR	NA	NE	NA	NE	NA	NE
		SUM =	99.884		99.884		99.884		99.884	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Slag Pouring

Profile Number:29301

Profile Data Quality:C/E

Control Device:Uncontrolled

Reference(s):43

Data Source:Sample is composite of short episodic emissions from many pours. Collected with modified high volume sampler.

SCC : 30301021

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.83	0.91	0.95

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NE	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NE	NA	NE	NA	NR
7429-90-5	13	AL	0.420	NE	0.420	NE	0.420	NE	0.420	0.100
7440-21-3	14	SI	1.900	NE	1.900	NE	1.900	NE	1.900	0.500
7723-14-0	15	P	0.266	NE	0.266	NE	0.266	NE	0.266	0.027
7704-34-9	16	S	5.523	NE	5.523	NE	5.523	NE	5.523	0.552
7782-50-5	17	CL	0.090	NE	0.090	NE	0.090	NE	0.090	0.020
7440-09-7	19	K	4.174	NE	4.174	NE	4.174	NE	4.174	0.417
7440-70-2	20	CA	2.600	NE	2.600	NE	2.600	NE	2.600	0.400
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.104	NE	0.104	NE	0.104	NE	0.104	0.010
7440-62-2	23	V	<	NE	<	NE	<	NE	<	NR
7440-47-3	24	CR	0.020	NE	0.020	NE	0.020	NE	0.020	NR
7439-96-5	25	MN	0.100	NE	0.100	NE	0.100	NE	0.100	0.030
7439-89-6	26	FE	3.735	NE	3.735	NE	3.735	NE	3.735	0.373
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	N3
7440-02-0	28	NI	0.066	NE	0.066	NE	0.066	NE	0.066	<
7440-50-8	29	CU	0.375	NE	0.375	NE	0.375	NE	0.375	0.037
7440-66-6	30	ZN	32.477	NE	32.477	NE	32.477	NE	32.477	3.248
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	<
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	<
7440-38-2	33	AS	5.196	NE	5.196	NE	5.196	NE	5.196	0.520

continued (profile=29301)

									Total Particulate Measured(a)	
	Species	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)			
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.208	NE	0.208	NE	0.208	NE	0.208	0.121
7726-95-6	35	BR	<	NE	<	NE	<	NE	<	<
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	<
7440-24-6	38	SR	0.052	NE	0.052	NE	0.052	NE	0.052	<
7440-22-4	47	AG	0.130	NE	0.130	NE	0.130	NE	0.130	0.019
7440-43-9	48	CD	0.159	NE	0.159	NE	0.159	NE	0.159	0.024
7440-74-6	49	IN	0.011	NE	0.011	NE	0.011	NE	0.011	<
7440-31-5	50	SN	3.849	NE	3.849	NE	3.849	NE	3.849	0.385
7440-36-0	51	SB	1.626	NE	1.626	NE	1.626	NE	1.626	0.163
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NE	<	NE	<	0.102
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	0.000
7439-97-6	80	HG	0.092	NE	0.092	NE	0.092	NE	0.092	0.011
7439-92-1	82	PB	3.156	NE	3.156	NE	3.156	NE	3.156	0.316
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	66.329		66.329		66.329		66.329	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Blast Furnace

Profile Number:29302

Profile Data Quality:B/C

Control Device:Baghouse

Reference(s):43

Data Source:Sampled with a dilution sampler.

SCC : 30301002

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.57	0.72	0.82

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.100	0.100	0.100	0.100	0.100	0.095	0.100	0.071
7440-21-3	14	SI	0.200	0.200	0.200	0.200	0.200	0.189	0.200	0.141
7723-14-0	15	P	0.764	0.076	0.730	0.073	0.753	0.121	0.758	0.076
7704-34-9	16	S	13.269	1.446	13.189	1.607	13.242	2.265	13.255	1.325
7782-50-5	17	CL	5.000	0.800	4.700	0.500	4.899	0.897	4.949	0.495
7440-09-7	19	K	2.075	0.207	2.179	0.218	2.110	0.345	2.093	0.209
7440-70-2	20	CA	0.550	0.055	0.540	0.070	0.547	0.093	0.548	0.055
7440-32-6	22	TI	0.027	NR	0.038	NR	0.031	NE	0.029	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.020	NR	0.031	NR	0.024	NE	0.022	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	0.131	0.013	0.163	0.021	0.142	0.026	0.136	0.014
7440-02-0	28	NI	0.060	NR	0.055	NR	0.058	NE	0.059	NR
7440-50-8	29	CU	0.354	0.035	0.355	0.035	0.354	0.057	0.354	0.035
7440-66-6	30	ZN	15.217	1.522	14.917	1.492	15.116	2.446	15.166	1.517
7440-38-2	33	AS	3.047	0.305	3.347	0.335	3.148	0.520	3.098	0.310
7782-49-2	34	SE	0.037	NR	0.018	NR	0.031	NE	0.034	NR
7726-95-6	35	BR	0.130	0.030	0.120	0.020	0.127	0.029	0.128	0.018
7440-24-6	38	SR	<	NR	<	0.011	NE	NE	<	NR
7440-05-3	46	PD	0.201	0.020	0.025	0.024	0.142	0.028	0.171	0.017

continued (profile=29302)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-22-4	47	AG	0.166	0.017	0.146	0.040	0.159	0.035	0.163	0.021
7440-43-9	48	CD	23.503	2.350	21.308	2.131	22.763	3.642	23.130	2.313
7440-74-6	49	IN	0.015	NR	0.050	NR	0.027	NE	0.021	NR
7440-31-5	50	SN	0.501	0.050	0.482	0.081	0.495	0.091	0.498	0.050
7440-36-0	51	SB	0.137	0.065	0.059	0.151	0.111	0.110	0.124	0.082
7440-39-3	56	BA	0.178	0.066	0.216	0.308	0.191	0.210	0.184	0.157
7439-97-6	80	HG	0.022	0.013	0.025	0.020	0.023	0.016	0.022	0.012
7439-92-1	82	PB	30.867	3.087	29.683	2.968	30.468	4.916	30.666	3.067
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	96.571		92.676		95.261		95.908	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Zinc Fuming

Profile Number:29303

Profile Data Quality:B/C

Control Device:Baghouse

Reference(s):43

Data Source:Sampled with a dilution sampler.

SCC : 30301008

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.57	0.72	0.86

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.500	0.100	0.300	0.100	0.433	0.109	0.450	0.071
7440-21-3	14	SI	1.500	0.300	0.700	0.200	1.230	0.285	1.300	0.180
7723-14-0	15	P	0.164	0.016	0.182	0.018	0.170	0.028	0.168	0.017
7704-34-9	16	S	2.567	0.334	3.544	0.449	2.896	0.553	2.811	0.281
7782-50-5	17	CL	1.700	0.400	0.300	0.100	1.228	0.318	1.350	0.206
7440-09-7	19	K	0.550	0.055	0.613	0.061	0.571	0.094	0.566	0.057
7440-70-2	20	CA	0.200	0.100	0.300	0.100	0.234	0.100	0.225	0.071
7440-32-6	22	TI	0.026	NR	0.033	NR	0.028	NE	0.028	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.011	NR	0.014	NR	0.012	NE	0.012	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	0.164	0.016	0.386	0.039	0.239	0.048	0.219	0.022
7440-02-0	28	NI	0.098	NR	0.104	0.010	0.100	NE	0.099	NR
7440-50-8	29	CU	0.207	0.021	0.273	0.027	0.229	0.039	0.223	0.022
7440-66-6	30	ZN	53.517	5.352	59.174	5.917	55.425	9.159	54.931	5.493
7440-38-2	33	AS	1.424	0.142	1.525	0.152	1.458	0.239	1.449	0.145
7782-49-2	34	SE	0.011	NR	0.012	NR	0.011	NE	0.011	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-05-3	46	PD	0.128	0.013	0.063	0.011	0.106	0.017	0.112	0.011

continued (profile=29303)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-22-4	47	AG	0.048	NR	0.039	0.012	0.045	NE	0.046	NR
7440-43-9	48	CD	0.084	NR	0.062	0.019	0.077	NE	0.078	0.011
7440-74-6	49	IN	0.056	NR	0.030	NR	0.047	NE	0.049	NR
7440-31-5	50	SN	0.703	0.070	0.706	0.071	0.704	0.114	0.704	0.070
7440-36-0	51	SB	0.545	0.054	0.587	0.061	0.559	0.092	0.555	0.055
7440-39-3	56	BA	<	0.039	<	0.100	NE	NE	<	0.054
7439-97-6	80	HG	0.064	NR	0.061	NR	0.063	NE	0.063	NR
7439-92-1	82	PB	7.459	0.746	9.645	0.964	8.196	1.400	8.005	0.800
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	71.726		78.653		74.061		73.454	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Sintering

Profile Number:29304

Profile Data Quality:B/C

Control Device:Baghouse

Reference(s):43

Data Source:Sampled with a dilution sampler.

SCC : 30301001

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.82	0.89	0.92

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.900	0.090	1.000	0.300	0.911	0.327	0.922	0.180
7440-21-3	14	SI	3.000	0.300	3.500	1.000	3.054	1.097	3.110	0.707
7723-14-0	15	P	0.798	0.080	0.767	0.120	0.795	0.190	0.791	0.079
7704-34-9	16	S	15.829	1.583	15.097	2.390	15.749	3.759	15.667	1.567
7782-50-5	17	CL	1.000	0.100	0.900	0.200	0.989	0.262	0.978	0.269
7440-09-7	19	K	0.889	0.089	0.741	0.112	0.873	0.194	0.856	0.086
7440-70-2	20	CA	2.600	0.260	5.000	1.000	2.861	1.163	3.128	0.522
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.169	0.017	0.203	0.031	0.173	0.046	0.176	0.018
7440-62-2	23	V	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-47-3	24	CR	0.046	0.005	0.065	0.013	0.048	0.016	0.050	0.000
7439-96-5	25	MN	0.380	0.038	0.500	0.100	0.393	0.124	0.406	0.064
7439-89-6	26	FE	5.764	0.576	7.761	1.085	5.981	1.638	6.203	0.620
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.082	0.008	0.093	0.017	0.083	0.023	0.084	0.000
7440-50-8	29	CU	1.498	0.150	2.060	0.289	1.559	0.433	1.622	0.162
7440-66-6	30	ZN	4.174	0.417	5.678	0.793	4.337	1.194	4.505	0.450
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	4.948	0.495	2.900	0.429	4.725	0.929	4.497	0.450

continued (profile=29304)

	Species		0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.129	0.013	0.085	0.018	0.124	0.028	0.119	0.012
7726-95-6	35	BR	0.080	0.020	0.060	0.000	0.078	0.022	0.076	0.011
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.198	0.020	0.262	0.040	0.205	0.057	0.212	0.021
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.246	0.034	0.234	0.070	0.245	0.082	0.243	0.039
7440-43-9	48	CD	1.358	0.000	1.158	0.192	1.336	0.283	1.314	0.131
7440-31-5	50	SN	0.234	0.049	0.128	0.106	0.222	0.109	0.211	0.058
7440-36-0	51	SB	1.907	0.191	1.603	0.312	1.874	0.453	1.840	0.184
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.115	0.205	0.375	0.491	0.143	0.477	0.172	0.266
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	0.172	0.022	0.142	0.033	0.169	0.045	0.165	0.020
7439-92-1	82	PB	26.610	2.661	26.900	3.750	26.642	6.288	26.674	2.667
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	73.126		77.212		73.569		74.021	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Blast Furnace Upset

Profile Number:29305

Profile Data Quality:B/C

Control Device:Baghouse

Reference(s):43

Data Source:Blast furnace upset samples collected with a dilution sampler.

SCC : 30301002

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.57	0.72	0.86

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	<	NR	0.220	0.050	NE	NE	<	NR
7440-21-3	14	SI	0.030	NR	0.500	0.200	0.188	NE	0.030	NR
7723-14-0	15	P	0.959	0.096	0.642	0.064	0.852	0.132	0.688	0.069
7704-34-9	16	S	19.400	2.077	11.885	1.463	16.866	2.717	14.058	1.901
7782-50-5	17	CL	3.880	1.000	2.000	0.500	3.246	0.846	4.000	1.000
7440-09-7	19	K	2.321	0.232	1.466	0.147	2.033	0.315	1.510	0.151
7440-70-2	20	CA	0.500	0.100	0.500	0.073	0.500	0.105	0.500	0.100
7440-32-6	22	TI	0.033	NR	0.050	NR	0.039	NE	0.060	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.017	NR	0.020	NR	0.018	NE	0.023	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	0.124	0.012	0.942	0.094	0.400	0.109	1.624	0.162
7440-02-0	28	NI	0.063	NR	0.057	NR	0.061	NE	0.067	NR
7440-50-8	29	CU	0.184	0.018	0.414	0.041	0.262	0.052	0.677	0.068
7440-66-6	30	ZN	7.420	0.754	14.918	1.492	9.948	1.915	6.184	0.618
7440-38-2	33	AS	3.349	0.335	1.541	0.162	2.739	0.425	2.855	0.285
7782-49-2	34	SE	0.072	NR	0.023	NR	0.055	NE	0.074	0.011
7726-95-6	35	BR	0.110	0.030	0.032	NR	0.084	NE	0.110	0.030
7440-24-6	38	SR	0.035	NR	0.037	NR	0.036	NE	0.062	NR
7440-05-3	46	PD	0.308	0.031	0.063	0.021	0.225	0.039	0.144	0.014

continued (profile=29305)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-22-4	47	AG	0.152	0.015	0.079	0.029	0.127	0.027	0.117	0.012
7440-43-9	48	CD	16.240	1.647	7.872	0.787	13.418	2.080	10.202	1.020
7440-74-6	49	IN	0.030	NR	0.030	NR	0.030	NE	0.030	NR
7440-31-5	50	SN	0.585	0.058	0.289	0.058	0.485	0.082	0.363	0.036
7440-36-0	51	SB	0.297	0.050	0.217	0.108	0.270	0.086	0.399	0.056
7440-39-3	56	BA	0.144	0.050	<	0.230	NE	NE	0.213	0.056
7439-97-6	80	HG	0.117	0.018	0.069	0.020	0.101	0.022	0.035	0.018
7439-92-1	82	PB	43.630	4.395	29.507	2.951	38.868	6.057	42.687	4.269
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	100.000		73.373		91.020		86.712	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting-Zinc Baghouse

Profile Number:29306

Profile Data Quality:B/C

Control Device:Baghouse

Reference(s):43

Data Source:Sampled within the zinc fuming baghouse with dichotomous and low-volume samplers.

SCC : 30301008

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.82	0.89	0.92

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.050	0.020	1.551	0.155	0.213	0.240	0.600	0.200
7440-21-3	14	SI	0.779	0.078	5.091	0.509	1.248	0.795	2.000	0.800
7723-14-0	15	P	0.311	0.031	0.272	0.027	0.307	0.064	0.190	0.019
7704-34-9	16	S	6.254	0.639	4.308	0.575	6.042	1.226	3.041	0.558
7782-50-5	17	CL	<	0.054	0.050	0.050	NE	NE	0.150	0.050
7440-09-7	19	K	0.949	0.095	0.834	0.083	0.936	0.195	0.862	0.086
7440-70-2	20	CA	0.500	0.300	1.000	0.200	0.554	0.351	0.500	0.100
7440-32-6	22	TI	0.042	NR	0.090	NR	0.047	NE	0.082	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.016	NR	0.014	NR	0.016	NE	0.017	NR
7439-96-5	25	MN	<	NR	0.050	NR	NE	NE	0.030	NR
7439-89-6	26	FE	0.221	0.022	1.150	0.115	0.322	0.181	1.042	0.104
7440-02-0	28	NI	0.095	NR	0.098	NR	0.095	NE	0.115	0.011
7440-50-8	29	CU	0.259	0.026	0.498	0.050	0.285	0.087	0.625	0.062
7440-66-6	30	ZN	50.140	5.014	43.478	4.348	49.416	10.245	53.304	5.330
7440-38-2	33	AS	2.298	0.230	1.457	0.146	2.207	0.420	1.777	0.178
7782-49-2	34	SE	0.011	NR	0.011	NR	0.011	NE	0.020	NR
7726-95-6	35	BR	0.030	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	0.014	NR	NE	NE	0.011	NR
7440-05-3	46	PD	0.034	0.014	0.053	0.013	0.036	0.019	0.080	0.000

continued (profile=29306)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-22-4	47	AG	0.032	0.019	0.037	0.017	0.033	0.024	0.033	NR
7440-43-9	48	CD	0.080	0.031	0.030	0.026	0.075	0.038	0.070	0.013
7440-74-6	49	IN	0.030	NR	<	NR	NE	NE	0.011	NR
7440-31-5	50	SN	1.066	0.107	0.702	0.070	1.026	0.197	0.861	0.086
7440-36-0	51	SB	0.717	0.092	0.413	0.069	0.684	0.146	0.728	0.073
7440-39-3	56	BA	<	0.168	<	0.144	NE	NE	<	0.055
7439-97-6	80	HG	0.048	0.011	0.049	NR	0.048	NE	0.059	NR
7439-92-1	82	PB	12.440	1.244	12.482	1.248	12.445	2.720	12.780	1.278
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	76.402		73.732		76.112		78.988	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting-Dross Reverberatory Furnace

Profile Number:29307

Profile Data Quality:B/C

Control Device:Uncontrolled

Reference(s):43

Data Source:Samples collected near building vents with dichotomous and low-volume sampler.

SCC : 30301003

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.81	0.92	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.030	NR	0.500	0.100	0.112	NE	0.030	NR
7440-21-3	14	SI	0.200	0.100	1.460	0.146	0.419	0.226	0.200	0.100
7723-14-0	15	P	0.125	0.012	0.141	0.014	0.128	0.027	0.035	NR
7704-34-9	16	S	1.667	0.244	1.534	0.533	1.644	0.552	<	0.582
7782-50-5	17	CL	<	0.017	<	0.034	NE	NE	<	0.038
7440-09-7	19	K	0.108	0.011	0.279	0.028	0.138	0.043	<	NR
7440-70-2	20	CA	0.600	0.100	1.160	0.116	0.697	0.198	0.763	0.076
7440-32-6	22	TI	0.060	NR	0.056	NR	0.059	NE	0.016	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	0.013	NR	NE	NE	0.016	NR
7439-96-5	25	MN	0.013	NR	0.039	NR	0.018	NE	0.024	NR
7439-89-6	26	FE	0.106	0.011	0.752	0.075	0.218	0.109	0.744	0.074
7440-02-0	28	NI	0.054	NR	0.076	NR	0.058	NE	0.086	NR
7440-50-8	29	CU	0.140	0.014	1.873	0.187	0.441	0.269	2.894	0.289
7440-66-6	30	ZN	2.361	0.236	0.963	0.096	2.118	0.365	1.358	0.136
7440-38-2	33	AS	57.818	5.782	20.000	2.000	51.258	8.758	24.000	3.000
7782-49-2	34	SE	0.115	0.011	0.084	NR	0.110	NE	0.093	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	0.014	NR	NE	NE	0.011	NR
7440-05-3	46	PD	2.389	0.239	0.504	0.050	2.062	0.350	1.090	0.109

continued (profile=29307)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-22-4	47	AG	0.854	0.085	0.300	0.030	0.758	0.129	0.494	0.049
7440-43-9	48	CD	1.164	0.116	0.800	0.200	1.101	0.253	1.219	0.122
7440-74-6	49	IN	0.023	NR	0.191	0.019	0.052	NE	0.231	0.023
7440-31-5	50	SN	0.191	0.019	1.600	0.300	0.435	0.312	1.242	0.124
7440-36-0	51	SB	5.200	1.000	2.000	0.300	4.645	1.081	2.700	0.400
7440-39-3	56	BA	0.078	0.022	0.032	0.023	0.070	0.028	0.125	0.014
7439-97-6	80	HG	0.269	0.027	0.107	0.011	0.241	0.042	0.104	0.010
7439-92-1	82	PB	5.561	0.556	16.000	4.000	7.372	3.881	13.482	1.348
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	79.126		50.478		74.158		50.957	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting-Sinter Production

Profile Number:29309

Profile Data Quality:B/C

Control Device:Uncontrolled

Reference(s):43

Data Source:Samples collected at various locations on the pile. Bulk sample sieved and resuspended.

SCC : 30301025

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.87	0.94	0.98

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.050	0.050	0.650	0.065	0.117	0.110	0.050	0.050
7440-21-3	14	SI	0.900	0.200	2.900	0.400	1.124	0.550	0.460	0.100
7723-14-0	15	P	0.300	0.030	0.360	0.040	0.307	0.074	0.120	0.040
7704-34-9	16	S	1.400	2.000	6.000	2.000	1.916	2.627	1.000	1.000
7782-50-5	17	CL	2.000	1.000	1.000	0.300	1.888	0.968	0.500	0.500
7440-09-7	19	K	0.020	0.020	0.240	0.024	0.045	0.041	0.050	0.050
7440-70-2	20	CA	0.050	0.020	2.000	0.200	0.269	0.308	0.500	0.100
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	0.040	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.016	NR	0.038	NR	0.018	NE	0.017	NR
7439-96-5	25	MN	0.015	NR	0.300	0.100	0.047	NE	0.120	0.012
7439-89-6	26	FE	0.160	0.020	4.800	0.500	0.681	0.749	2.344	0.234
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.056	NR	0.083	NR	0.059	NE	0.061	NR
7440-50-8	29	CU	0.221	0.022	1.659	0.166	0.382	0.257	1.007	0.101
7440-66-6	30	ZN	0.867	0.087	4.243	0.424	1.246	0.666	2.688	0.269
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	8.692	0.869	5.532	0.553	8.337	1.584	4.921	0.492

continued (profile=29309)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.155	0.015	0.084	NR	0.147	NE	0.101	0.010
7726-95-6	35	BR	0.100	0.050	0.100	0.050	0.100	0.065	0.100	0.050
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.030	NR	0.184	0.018	0.047	NE	0.097	NR
7440-05-3	46	PD	2.702	0.270	0.746	0.075	2.482	0.431	0.730	0.073
7440-22-4	47	AG	0.699	0.070	0.378	0.038	0.663	0.122	0.347	0.035
7440-43-9	48	CD	8.859	0.886	2.884	0.288	8.188	1.433	3.705	0.370
7440-74-6	49	IN	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	2.541	0.254	0.680	0.068	2.332	0.404	0.776	0.078
7440-36-0	51	SB	2.380	0.238	1.833	0.183	2.319	0.462	1.725	0.172
7440-39-3	56	BA	0.522	0.052	0.257	0.026	0.492	0.089	0.275	0.027
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	0.129	0.018	0.187	0.019	0.136	0.037	0.119	0.013
7439-92-1	82	PB	46.503	4.650	27.915	2.791	44.417	8.340	31.410	3.141
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	79.367		65.093		77.763		53.223	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Primary Lead Smelting - Composite

Profile Number:29330

Profile Data Quality:C

Control Device:Baghouse

Reference(s):43

Data Source:Developed from profiles 29303 and 29306.

SCC : 30301008

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.69	0.80	0.89

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7429-90-5	13	AL	0.483	0.079	0.950	0.203	0.588	0.205	0.657	0.161
7440-21-3	14	SI	1.760	0.249	3.097	0.658	2.060	0.671	2.137	0.625
7723-14-0	15	P	0.424	0.050	0.407	0.072	0.420	0.094	0.383	0.048
7704-34-9	16	S	8.217	1.004	7.650	1.443	8.089	1.836	7.173	0.974
7782-50-5	17	CL	0.900	0.240	0.417	0.132	0.791	0.239	0.826	0.198
7440-09-7	19	K	0.796	0.082	0.729	0.088	0.781	0.151	0.761	0.078
7440-70-2	20	CA	1.100	0.236	2.100	0.592	1.325	0.558	1.284	0.310
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.079	0.010	0.109	0.018	0.086	0.022	0.095	0.010
7440-62-2	23	V	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-47-3	24	CR	0.024	0.003	0.031	0.008	0.026	0.008	0.026	0.000
7439-96-5	25	MN	0.127	0.022	0.183	0.058	0.139	0.034	0.145	0.037
7439-89-6	26	FE	2.050	0.333	3.099	0.630	2.285	0.687	2.488	0.363
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.092	0.005	0.098	0.011	0.093	0.018	0.099	0.006
7440-50-8	29	CU	0.655	0.089	0.944	0.170	0.720	0.195	0.823	0.101
7440-66-6	30	ZN	35.944	4.241	36.110	4.264	35.981	7.276	37.580	4.427
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	2.890	0.326	1.961	0.276	2.681	0.506	2.574	0.292

continued (profile=29330)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.050	0.008	0.036	0.010	0.047	0.012	0.050	0.007
7726-95-6	35	BR	0.037	0.012	0.020	0.000	0.033	0.010	0.025	0.006
7440-17-7	37	RB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-24-6	38	SR	0.066	0.012	0.092	0.023	0.072	0.024	0.074	0.012
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-05-3	46	PD	0.054	0.011	0.039	0.010	0.051	0.014	0.064	0.006
7440-22-4	47	AG	0.109	0.022	0.103	0.042	0.107	0.041	0.107	0.023
7440-43-9	48	CD	0.507	0.018	0.417	0.112	0.487	0.114	0.487	0.076
7440-74-6	49	IN	0.029	0.000	0.010	0.000	0.024	0.003	0.020	0.000
7440-31-5	50	SN	0.668	0.079	0.512	0.084	0.633	0.128	0.592	0.072
7440-36-0	51	SB	1.056	0.126	0.868	0.188	1.014	0.231	1.041	0.119
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.038	0.155	0.125	0.301	0.058	0.263	0.057	0.160
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.095	0.014	0.084	0.019	0.092	0.023	0.096	0.012
7439-92-1	82	PB	15.503	1.750	16.342	2.349	15.692	3.355	15.820	1.769
	201	OC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	202	EC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	203	SO4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		SUM =	73.753		76.533		74.375		75.484	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.5 SECONDARY METAL PRODUCTION

Secondary metal production is the production of metals from scrap material. Processes generating particulate emissions can include smelting, pouring into molds, cleaning, refining, alloying, and storage and handling.

Profile Name:Scrap Copper Incinerator

Profile Number:19101

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):43

Data Source:Plume sample collected with low-volume sampler. Incineration of machinery oil and plastic and insulation.

SCC : 30400208

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.24	0.32	0.42

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NE	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NE	NA	NE	NA	NR
7429-90-5	13	AL	<	NE	<	NE	<	NE	<	NR
7440-21-3	14	SI	<	NE	<	NE	<	NE	<	NR
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	0.115	NE	0.115	NE	0.115	NE	0.115	0.011
7782-50-5	17	CL	<	NE	<	NE	<	NE	<	NR
7440-09-7	19	K	<	NE	<	NE	<	NE	<	NR
7440-70-2	20	CA	<	NE	<	NE	<	NE	<	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	<	NE	<	NE	<	NE	<	NR
7440-62-2	23	V	<	NE	<	NE	<	NE	<	NR
7440-47-3	24	CR	<	NE	<	NE	<	NE	<	NR
7439-96-5	25	MN	<	NE	<	NE	<	NE	<	NR
7439-89-6	26	FE	<	NE	<	NE	<	NE	<	NR
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	<	NE	<	NE	<	NE	<	NR
7440-50-8	29	CU	0.071	NE	0.071	NE	0.071	NE	0.071	NR
7440-66-6	30	ZN	<	NE	<	NE	<	NE	<	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NE	<	NE	<	NR

continued (profile=19101)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	<	NE	<	NE	<	NE	<	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NE	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NE	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NE	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	<	NE	<	NE	<	NE	<	NR
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	0.186		0.186		0.186		0.186	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Aluminum Foundry-Reverboratory Furnace

Profile Number:20101

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones, at 400 deg. F. Cyclone and filter catches analyzed by XRF. Si,P, and S non-quantitative.

SCC : 30400103

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.50	0.53	0.60

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	<	NR	<	NR	NE	NE	<	NR
7782-50-5	17	CL	11.000	NR	11.000	NR	11.000	NE	11.000	NR
7440-09-7	19	K	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-70-2	20	CA	3.000	NR	3.000	NR	3.000	NE	3.000	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7439-96-5	25	MN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-89-6	26	FE	6.000	NR	6.000	NR	6.000	NE	6.000	NR
7440-48-4	27	CO	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-02-0	28	NI	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-50-8	29	CU	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=20101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.050	NR	0.050	NR	0.050	NE	0.050	NR
	201	OC	13.000	NR	13.000	NR	13.000	NE	13.000	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	16.000	NR	16.000	NR	16.000	NE	16.000	NR
	204	NO3	0.550	NR	0.550	NR	0.550	NE	0.550	NR
		SUM =	51.550		51.550		51.550		51.550	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Secondary Aluminum Plant - Dross Recovery Furnace

Profile Number:20102

Profile Data Quality:B/D

Control Device:Baghouse

Reference(s):52

Data Source:Dilution sampling train.

SCC : 30400107

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.82	0.89	0.92

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	1.447	0.082	4.857	0.447	1.818	0.756	1.818	NE
7440-21-3	14	SI	6.412	0.315	11.501	1.055	6.965	1.928	6.965	NE
7723-14-0	15	P	0.373	0.068	0.374	0.114	0.373	0.136	0.373	NE
7704-34-9	16	S	2.883	0.156	1.959	0.261	2.783	0.516	2.783	NE
7782-50-5	17	CL	23.212	1.139	17.746	1.875	22.618	4.170	22.618	NE
7440-09-7	19	K	10.035	0.490	10.295	1.017	10.063	2.073	10.063	NE
7440-70-2	20	CA	0.079	0.030	0.764	0.090	0.153	0.129	0.153	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.025	0.003	0.112	0.015	0.034	0.020	0.034	NE
7440-62-2	23	V	0.006	0.001	0.010	0.005	0.006	0.005	0.006	NE
7440-47-3	24	CR	0.028	0.003	0.063	0.009	0.032	0.012	0.032	NE
7439-96-5	25	MN	0.010	0.002	0.037	0.007	0.013	0.008	0.013	NE
7439-89-6	26	FE	0.251	0.015	1.319	0.120	0.367	0.201	0.367	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.033	0.003	0.052	0.010	0.035	0.012	0.035	NE
7440-50-8	29	CU	0.042	0.004	0.104	0.014	0.049	0.019	0.049	NE
7440-66-6	30	ZN	0.079	0.005	0.202	0.022	0.092	0.034	0.092	NE
7440-55-3	31	GA	0.000	0.001	0.000	0.004	0.000	0.004	0.000	NE
7440-56-4	32	GE	<	0.005	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.011	0.005	0.005	0.014	0.010	0.013	0.010	NE

continued (profile=20102)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.016	0.002	0.013	0.005	0.016	0.005	0.016	NE
7726-95-6	35	BR	0.065	0.004	0.039	0.009	0.062	0.013	0.062	NE
7440-17-7	37	RB	0.004	0.003	0.000	0.007	0.004	0.007	0.004	NE
7440-24-6	38	SR	0.005	0.003	0.003	0.009	0.005	0.008	0.005	NE
7440-67-7	40	ZR	0.002	0.015	0.039	0.044	0.006	0.042	0.006	NE
7440-22-4	47	AG	0.020	0.014	0.061	0.043	0.024	0.041	0.024	NE
7440-43-9	48	CD	0.000	0.019	0.083	0.057	0.009	0.055	0.009	NE
7440-31-5	50	SN	0.047	0.025	0.000	0.079	0.042	0.074	0.042	NE
7440-36-0	51	SB	0.597	0.068	0.353	0.162	0.570	0.179	0.570	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.036	0.113	0.000	0.347	0.032	0.325	0.032	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	0.000	0.003	0.000	0.010	0.000	0.009	0.000	NE
7439-92-1	82	PB	0.079	0.009	0.094	0.023	0.081	0.027	0.081	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	45.797		50.085		46.262		46.262	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Secondary Lead Smelter - Blast Furnace

Profile Number:20401

Profile Data Quality:D/E

Control Device:Baghouse

Reference(s):23

Data Source:Samples by isokinetic Method 5 downstream of a baghouse. Analysis by Optical Emission Spec.

SCC : 30400403

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.65	0.78	0.84

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	<	NE	<	NE	<	NE	<	NR
7440-42-8	5	B	<	NE	<	NE	<	NE	<	NR
7782-41-4	9	F	<	NE	<	NE	<	NE	<	NR
7440-23-5	11	NA	3.000	NE	3.000	NE	3.000	NE	3.000	NR
7439-95-4	12	MG	0.001	NE	0.001	NE	0.001	NE	0.001	NR
7429-90-5	13	AL	0.003	NE	0.003	NE	0.003	NE	0.003	NR
7440-21-3	14	SI	0.300	NE	0.300	NE	0.300	NE	0.300	NR
7723-14-0	15	P	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7704-34-9	16	S	<	NE	<	NE	<	NE	<	NR
7782-50-5	17	CL	19.300	NE	19.300	NE	19.300	NE	19.300	NR
7440-09-7	19	K	1.000	NE	1.000	NE	1.000	NE	1.000	NR
7440-70-2	20	CA	0.030	NE	0.030	NE	0.030	NE	0.030	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	<	NE	<	NE	<	NE	<	NR
7440-62-2	23	V	0.001	NE	0.001	NE	0.001	NE	0.001	NR
7440-47-3	24	CR	0.001	NE	0.001	NE	0.001	NE	0.001	NR
7439-96-5	25	MN	0.003	NE	0.003	NE	0.003	NE	0.003	NR
7439-89-6	26	FE	0.100	NE	0.100	NE	0.100	NE	0.100	NR
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	0.001	NE	0.001	NE	0.001	NE	0.001	NR
7440-50-8	29	CU	0.030	NE	0.030	NE	0.030	NE	0.030	NR
7440-66-6	30	ZN	0.300	NE	0.300	NE	0.300	NE	0.300	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	0.300	NE	0.300	NE	0.300	NE	0.300	NR

continued (profile=20401)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	<	NE	<	NE	<	NE	<	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	0.700	NE	0.700	NE	0.700	NE	0.700	NR
7440-31-5	50	SN	2.000	NE	2.000	NE	2.000	NE	2.000	NR
7440-36-0	51	SB	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NE	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	50.000	NE	50.000	NE	50.000	NE	50.000	NR
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	7.530	NE	7.530	NE	7.530	NE	7.530	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	84.850		84.850		84.850		84.850	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Zinc Oxide Kiln

Profile Number:20501

Profile Data Quality:C/E

Control Device:Unspecified

Reference(s):43

Data Source:Sample collected at duct discharge with low-volume sampler.

SCC : 30400899

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NE	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NE	NA	NE	NA	NR
7429-90-5	13	AL	0.423	NE	0.423	NE	0.423	NE	0.423	0.045
7440-21-3	14	SI	0.574	NE	0.574	NE	0.574	NE	0.574	0.057
7723-14-0	15	P	0.188	NE	0.188	NE	0.188	NE	0.188	0.019
7704-34-9	16	S	3.290	NE	3.290	NE	3.290	NE	3.290	0.516
7782-50-5	17	CL	0.427	NE	0.427	NE	0.427	NE	0.427	0.057
7440-09-7	19	K	0.615	NE	0.615	NE	0.615	NE	0.615	0.061
7440-70-2	20	CA	0.231	NE	0.231	NE	0.231	NE	0.231	0.023
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.031	NE	0.031	NE	0.031	NE	0.031	NR
7440-62-2	23	V	0.011	NE	0.011	NE	0.011	NE	0.011	NR
7440-47-3	24	CR	0.018	NE	0.018	NE	0.018	NE	0.018	NR
7439-96-5	25	MN	0.021	NE	0.021	NE	0.021	NE	0.021	NR
7439-89-6	26	FE	0.188	NE	0.188	NE	0.188	NE	0.188	0.019
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	0.106	NE	0.106	NE	0.106	NE	0.106	0.011
7440-50-8	29	CU	0.254	NE	0.254	NE	0.254	NE	0.254	0.025
7440-66-6	30	ZN	63.182	NE	63.182	NE	63.182	NE	63.182	6.318
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	1.184	NE	1.184	NE	1.184	NE	1.184	0.118

continued (profile=20501)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.377	NE	0.377	NE	0.377	NE	0.377	0.038
7726-95-6	35	BR	0.120	NE	0.120	NE	0.120	NE	0.120	0.012
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-05-3	46	PD	0.055	NE	0.055	NE	0.055	NE	0.055	0.011
7440-22-4	47	AG	0.036	NE	0.036	NE	0.036	NE	0.036	NR
7440-43-9	48	CD	0.080	NE	0.080	NE	0.080	NE	0.080	0.018
7440-74-6	49	IN	0.033	NE	0.033	NE	0.033	NE	0.033	0.016
7440-31-5	50	SN	0.424	NE	0.424	NE	0.424	NE	0.424	0.042
7440-36-0	51	SB	0.391	NE	0.391	NE	0.391	NE	0.391	0.053
7440-39-3	56	BA	<	NE	<	NE	<	NE	<	0.078
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	0.064	NE	0.064	NE	0.064	NE	0.064	NR
7439-92-1	82	PB	11.664	NE	11.664	NE	11.664	NE	11.664	1.166
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	83.987		83.987		83.987		83.987	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Antimony Oxide Plant - Antimony Roasting

Profile Number:20502

Profile Data Quality:B/D

Control Device:Wet Scrubber

Reference(s):52

Data Source:Samples downstream from water scrubber system, collected with dilution sampler. One representative sample from group of 9.

SCC : 30400299

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.000	0.148	0.000	0.281	0.000	0.108	0.000	NE
7440-21-3	14	SI	0.000	0.148	0.000	0.281	0.000	0.108	0.000	NE
7723-14-0	15	P	0.000	0.037	0.000	0.066	0.000	0.026	0.000	NE
7704-34-9	16	S	1.334	0.068	1.493	0.146	1.439	0.111	1.439	NE
7782-50-5	17	CL	0.754	0.042	0.786	0.084	0.775	0.061	0.775	NE
7440-09-7	19	K	0.000	0.538	0.000	0.935	0.000	0.366	0.000	NE
7440-70-2	20	CA	<	9.197	<	1	NE	NE	NE	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.000	0.462	0.000	0.805	0.000	0.315	0.000	NE
7440-62-2	23	V	0.000	0.004	0.000	0.007	0.000	0.003	0.000	NE
7440-47-3	24	CR	0.005	0.001	0.080	0.004	0.055	0.004	0.055	NE
7439-96-5	25	MN	0.006	0.001	0.008	0.004	0.007	0.001	0.007	NE
7439-89-6	26	FE	0.108	0.006	0.125	0.016	0.119	0.010	0.119	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.015	0.001	0.010	0.004	0.012	0.002	0.012	NE
7440-50-8	29	CU	0.011	0.001	0.005	0.004	0.007	0.002	0.007	NE
7440-66-6	30	ZN	0.070	0.001	0.012	0.003	0.032	0.004	0.032	NE
7440-55-3	31	GA	0.005	0.001	0.004	0.003	0.004	0.001	0.004	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.078	0.005	0.090	0.013	0.086	0.007	0.086	NE

continued (profile=20502)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.008	0.001	0.008	0.003	0.008	0.001	0.008	NE
7726-95-6	35	BR	0.000	0.008	0.000	0.017	0.000	0.006	0.000	NE
7440-17-7	37	RB	0.000	0.001	0.000	0.005	0.000	0.002	0.000	NE
7440-24-6	38	SR	0.000	0.001	0.000	0.007	0.000	0.002	0.000	NE
7440-67-7	40	ZR	0.000	0.007	0.000	0.029	0.000	0.010	0.000	NE
7440-22-4	47	AG	0.000	0.007	0.000	0.029	0.000	0.010	0.000	NE
7440-43-9	48	CD	0.000	0.011	0.000	0.039	0.000	0.014	0.000	NE
7440-31-5	50	SN	0.000	0.027	0.000	0.355	0.000	0.121	0.000	NE
7440-36-0	51	SB	76.651	3.630	87.726	7.138	83.965	6.221	83.965	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.000	0.039	0.000	0.212	0.000	0.073	0.000	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	0.000	0.002	0.028	0.007	0.018	0.003	0.018	NE
7439-92-1	82	PB	0.128	0.007	0.103	0.018	0.111	0.010	0.111	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	79.173		90.478		86.638		86.638	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Cast Iron Induction Furnace

Profile Number:28201

Profile Data Quality:C/E

Control Device:Unspecified

Reference(s):47

Data Source:Mean of 3 tests during, melting, refining, and discharge.

SCC : 30400303

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.82	0.89	0.92

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	2.000	NE	2.000	NE	2.000	NE	2.000	NR
7439-95-4	12	MG	<	NE	<	NE	<	NE	<	NR
7429-90-5	13	AL	1.300	NE	1.300	NE	1.300	NE	1.300	NR
7440-21-3	14	SI	2.100	NE	2.100	NE	2.100	NE	2.100	NR
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	<	NE	<	NE	<	NE	<	NR
7782-50-5	17	CL	2.500	NE	2.500	NE	2.500	NE	2.500	NR
7440-09-7	19	K	3.200	NE	3.200	NE	3.200	NE	3.200	NR
7440-70-2	20	CA	1.500	NE	1.500	NE	1.500	NE	1.500	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.480	NE	0.480	NE	0.480	NE	0.480	NR
7440-62-2	23	V	0.006	NE	0.006	NE	0.006	NE	0.006	NR
7440-47-3	24	CR	0.024	NE	0.024	NE	0.024	NE	0.024	NR
7439-96-5	25	MN	1.700	NE	1.700	NE	1.700	NE	1.700	NR
7439-89-6	26	FE	5.700	NE	5.700	NE	5.700	NE	5.700	NR
7440-48-4	27	CO	0.002	NE	0.002	NE	0.002	NE	0.002	NR
7440-02-0	28	NI	0.098	NE	0.098	NE	0.098	NE	0.098	NR
7440-50-8	29	CU	0.120	NE	0.120	NE	0.120	NE	0.120	NR
7440-66-6	30	ZN	2.900	NE	2.900	NE	2.900	NE	2.900	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	0.012	NE	0.012	NE	0.012	NE	0.012	NR

continued (profile=28201)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	0.021	NE	0.021	NE	0.021	NE	0.021	NR
7440-17-7	37	RB	0.011	NE	0.011	NE	0.011	NE	0.011	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	0.012	NE	0.012	NE	0.012	NE	0.012	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NE	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NE	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.540	NE	0.540	NE	0.540	NE	0.540	NR
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	24.226		24.226		24.226		24.226	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Cast Iron Cupola

Profile Number:28202

Profile Data Quality:C/D

Control Device:Unspecified

Reference(s):47

Data Source:Mean of 5 tests. XRF and INAA analysis. Scrap and pig iron, coke, and limestone raw materials.

SCC : 30400301

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.85	0.92	0.93

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	1.300	NE	1.300	NE	1.300	NE	1.300	NR
7439-95-4	12	MG	<	NE	<	NE	<	NE	<	NR
7429-90-5	13	AL	1.100	NE	1.100	NE	1.100	NE	1.100	NR
7440-21-3	14	SI	24.000	NE	24.000	NE	24.000	NE	24.000	NR
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	2.300	NE	2.300	NE	2.300	NE	2.300	NR
7782-50-5	17	CL	0.890	NE	0.890	NE	0.890	NE	0.890	NR
7440-09-7	19	K	3.000	NE	3.000	NE	3.000	NE	3.000	NR
7440-70-2	20	CA	1.000	NE	1.000	NE	1.000	NE	1.000	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.060	NE	0.060	NE	0.060	NE	0.060	NR
7440-62-2	23	V	0.009	NE	0.009	NE	0.009	NE	0.009	NR
7440-47-3	24	CR	0.052	NE	0.052	NE	0.052	NE	0.052	NR
7439-96-5	25	MN	4.500	NE	4.500	NE	4.500	NE	4.500	NR
7439-89-6	26	FE	15.000	NE	15.000	NE	15.000	NE	15.000	NR
7440-48-4	27	CO	0.004	NE	0.004	NE	0.004	NE	0.004	NR
7440-02-0	28	NI	0.035	NE	0.035	NE	0.035	NE	0.035	NR
7440-50-8	29	CU	0.260	NE	0.260	NE	0.260	NE	0.260	NR
7440-66-6	30	ZN	0.830	NE	0.830	NE	0.830	NE	0.830	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	0.013	NE	0.013	NE	0.013	NE	0.013	NR

continued (profile=28202)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.002	NE	0.002	NE	0.002	NE	0.002	NR
7726-95-6	35	BR	0.009	NE	0.009	NE	0.009	NE	0.009	NR
7440-17-7	37	RB	0.022	NE	0.022	NE	0.022	NE	0.022	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NE	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	NR
7440-36-0	51	SB	0.370	NE	0.370	NE	0.370	NE	0.370	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NE	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.230	NE	0.230	NE	0.230	NE	0.230	NR
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	54.986		54.986		54.986		54.986	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Steel Electric Arc Furnace

Profile Number:28304

Profile Data Quality:C/D

Control Device:Baghouse

Reference(s):46

Data Source:Sampled with a 2-stage virtual impactor with a Method 5 heated probe. No dilution air. Analysis by XRF, INNA, IC, and carbon oxidation. Average of 2 baghouse samples.

SCC : 30400701

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.75	0.76	0.78

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	0.500	NA	0.500	NE	NE	NE	NE
7440-23-5	11	NA	1.260	0.480	1.260	0.480	1.260	0.696	1.260	NE
7439-95-4	12	MG	6.500	0.710	6.500	0.710	6.500	1.579	6.500	NE
7429-90-5	13	AL	0.650	0.160	0.650	0.160	0.650	0.251	0.650	NE
7440-21-3	14	SI	5.000	0.210	5.000	0.210	5.000	1.003	5.000	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	1.960	0.070	1.950	0.070	1.960	0.388	1.960	NE
7782-50-5	17	CL	1.850	0.780	1.850	0.780	1.850	1.119	1.850	NE
7440-09-7	19	K	0.920	0.070	0.920	0.070	0.920	0.201	0.920	NE
7440-70-2	20	CA	6.200	0.570	6.200	0.570	6.200	1.422	6.200	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.200	0.020	0.200	0.020	0.200	0.047	0.200	NE
7440-62-2	23	V	0.060	0.010	0.060	0.010	0.060	0.018	0.060	NE
7440-47-3	24	CR	2.100	1.400	2.100	1.400	2.100	1.946	2.100	NE
7439-96-5	25	MN	8.700	0.900	8.700	0.900	8.700	2.073	8.700	NE
7439-89-6	26	FE	32.000	3.000	32.000	3.000	32.000	7.383	32.000	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.700	0.070	0.700	0.070	0.700	0.165	0.700	NE
7440-50-8	29	CU	0.280	0.030	0.280	0.030	0.280	0.068	0.280	NE
7440-66-6	30	ZN	1.200	0.120	1.200	0.120	1.200	0.283	1.200	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=28304)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.760	0.070	0.760	0.070	0.760	0.174	0.760	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	2.500	1.300	2.500	1.300	2.500	1.832	2.500	NE
	204	NO3	NA	1.400	NA	1.400	NE	NE	NE	NE
		SUM =	72.840		72.830		72.840		72.840	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Steel Foundry - Steel Heat Treating (Salt Quench)

Profile Number:28601

Profile Data Quality:C/E

Control Device:Uncontrolled

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones, at 400 deg F. analyzed by XRF. Si, P, S non-quantitative. Average of 2 tests from baghouse outlet.

SCC : 30400704

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.78	0.91	0.94

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	NR	NE	NR	NE	NR	NE	NR	NR
7439-95-4	12	MG	NR	NE	NR	NE	NR	NE	NR	NR
7429-90-5	13	AL	NR	NE	NR	NE	NR	NE	NR	NR
7440-21-3	14	SI	<	NE	<	NE	<	NE	<	NR
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	<	NE	<	NE	<	NE	<	NR
7782-50-5	17	CL	30.000	NE	30.000	NE	30.000	NE	30.000	NR
7440-09-7	19	K	4.000	NE	4.000	NE	4.000	NE	4.000	NR
7440-70-2	20	CA	0.550	NE	0.550	NE	0.550	NE	0.550	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	<	NE	<	NE	<	NE	<	NR
7440-62-2	23	V	<	NE	<	NE	<	NE	<	NR
7440-47-3	24	CR	0.550	NE	0.550	NE	0.550	NE	0.550	NR
7439-96-5	25	MN	<	NE	<	NE	<	NE	<	NR
7439-89-6	26	FE	9.000	NE	9.000	NE	9.000	NE	9.000	NR
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	2.000	NE	2.000	NE	2.000	NE	2.000	NR
7440-50-8	29	CU	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NE	<	NE	<	NR

continued (profile=28601)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NE	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	0.550	NE	0.550	NE	0.550	NE	0.550	NR
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.050	NE	0.050	NE	0.050	NE	0.050	NR
	201	OC	6.000	NE	6.000	NE	6.000	NE	6.000	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	32.000	NE	32.000	NE	32.000	NE	32.000	NR
	204	NO3	0.550	NE	0.550	NE	0.550	NE	0.550	NR
		SUM =	85.450		85.450		85.450		85.450	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Copper Oxide Kiln

Profile Number:29203

Profile Data Quality:C/E

Control Device:Wet Scrubber

Reference(s):43

Data Source:Sampled with high-volume sampler from plume level at top of stack.

SCC : 30499999

Mass Fraction Data :			
Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NE	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NE	NA	NE	NA	NR
7429-90-5	13	AL	0.347	NE	0.347	NE	0.347	NE	0.347	0.035
7440-21-3	14	SI	0.362	NE	0.362	NE	0.362	NE	0.362	0.036
7723-14-0	15	P	0.193	NE	0.193	NE	0.193	NE	0.193	0.019
7704-34-9	16	S	4.488	NE	4.488	NE	4.488	NE	4.488	0.449
7782-50-5	17	CL	2.116	NE	2.116	NE	2.116	NE	2.116	0.212
7440-09-7	19	K	0.211	NE	0.211	NE	0.211	NE	0.211	0.021
7440-70-2	20	CA	0.750	NE	0.750	NE	0.750	NE	0.750	0.100
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.018	NE	0.018	NE	0.018	NE	0.018	NR
7440-62-2	23	V	<	NE	<	NE	<	NE	<	NR
7440-47-3	24	CR	0.014	NE	0.014	NE	0.014	NE	0.014	NR
7439-96-5	25	MN	<	NE	<	NE	<	NE	<	NR
7439-89-6	26	FE	0.100	NE	0.100	NE	0.100	NE	0.100	0.100
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	0.203	NE	0.203	NE	0.203	NE	0.203	0.020
7440-50-8	29	CU	54.151	NE	54.151	NE	54.151	NE	54.151	5.415
7440-66-6	30	ZN	0.127	NE	0.127	NE	0.127	NE	0.127	0.039
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NE	<	NE	<	NR

continued (profile=29203)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	0.018	NE	0.018	NE	0.018	NE	0.018	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	0.011	NE	0.011	NE	0.011	NE	0.011	NR
7440-05-3	46	PD	0.011	NE	0.011	NE	0.011	NE	0.011	NR
7440-43-9	48	CD	0.088	NE	0.088	NE	0.088	NE	0.088	0.016
7440-74-6	49	IN	<	NE	<	NE	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	0.018
7440-36-0	51	SB	<	NE	<	NE	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	0.013	NE	0.013	NE	0.013	NE	0.013	0.083
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.234	NE	0.234	NE	0.234	NE	0.234	0.023
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	63.455		63.455		63.455		63.455	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.6 MINERAL PRODUCTS INDUSTRY

Production and processing of minerals produces particulate emissions frequently of the same composition as the finished product. This is because most of the processes involved generate dust. These processes include quarrying, crushing, screening, drying, and storage and handling.

Profile Name:Limestone Dust

Profile Number:21101

Profile Data Quality:B/C

Control Device:Uncontrolled

Reference(s):43

Data Source:Limestone ground for use as flux. Samples sieved and resuspended.

SCC : 30301005

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.30	0.62	0.85

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	2.110	0.211	1.199	0.120	1.521	0.148	1.067	0.107
7440-21-3	14	SI	6.496	0.650	3.394	0.339	4.489	0.448	2.813	0.281
7723-14-0	15	P	0.126	0.040	<	0.029	NE	NE	<	0.029
7704-34-9	16	S	1.023	0.104	0.663	0.066	0.790	0.075	0.743	0.074
7782-50-5	17	CL	0.455	0.048	0.410	0.041	0.426	0.038	0.420	0.042
7440-09-7	19	K	0.163	0.042	0.135	0.023	0.145	0.020	0.091	0.022
7440-70-2	20	CA	29.515	2.951	29.723	2.972	29.650	2.561	28.643	2.864
7440-32-6	22	TI	0.081	NR	0.053	NR	0.063	NE	0.046	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	0.050	NR	0.028	NR	0.036	NE	0.025	NR
7439-89-6	26	FE	1.043	0.104	0.536	0.054	0.715	0.072	0.441	0.044
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	0.016	NR	<	NR	NE	NE	<	NR
7440-66-6	30	ZN	0.104	0.010	0.020	NR	0.050	NE	0.014	NR
7440-38-2	33	AS	0.020	0.013	<	NR	NE	NE	<	NR
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.027	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.024	NR	0.018	NR	0.020	NE	0.022	NR
7440-05-3	46	PD	<	0.021	<	NR	NE	NE	<	NR

continued (profile=21101)

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-22-4	47	AG	<	0.027	<	NR	NE	NE	<	NR
7440-43-9	48	CD	0.042	0.045	<	NR	NE	NE	<	NR
7440-74-6	49	IN	<	0.047	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	0.052	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	0.095	<	0.017	NE	NE	<	NR
7440-39-3	56	BA	<	0.256	<	0.044	NE	NE	<	0.022
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.270	0.027	0.048	NR	0.126	NE	0.051	NR
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	41.565		36.227		38.113		34.376	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Coke Dust

Profile Number:21203

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):43

Data Source:Fugitive dust from storage and handling. Bulk sample ground, sieved and resuspended.

SCC : 30510104 30510204 30510304 30510404 30510504

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	4.039	0.519	2.568	0.257	3.001	0.262	3.007	0.301
7440-21-3	14	SI	8.131	1.005	6.250	0.625	6.803	0.551	7.663	0.766
7723-14-0	15	P	0.137	0.041	0.118	0.012	0.124	0.015	0.144	0.014
7704-34-9	16	S	0.381	0.132	0.568	0.057	0.513	0.051	0.596	0.060
7782-50-5	17	CL	0.164	0.055	0.032	0.000	0.071	0.018	0.047	0.000
7440-09-7	19	K	0.217	0.038	0.167	0.017	0.182	0.017	0.187	0.019
7440-70-2	20	CA	2.738	0.342	2.285	0.228	2.418	0.191	2.229	0.223
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.236	0.034	0.157	0.016	0.180	0.016	0.181	0.018
7440-62-2	23	V	0.022	0.000	0.000	0.000	0.006	0.001	0.000	0.000
7440-47-3	24	CR	0.016	0.000	0.000	0.000	0.005	0.001	0.000	0.000
7439-96-5	25	MN	0.000	0.000	0.010	0.000	0.007	0.000	0.013	0.000
7439-89-6	26	FE	1.464	0.189	0.907	0.091	1.071	0.095	1.037	0.104
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-50-8	29	CU	0.516	0.068	0.731	0.073	0.668	0.047	1.083	0.108
7440-66-6	30	ZN	0.399	0.054	0.313	0.031	0.338	0.028	0.459	0.046
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	0.041	0.026	0.021	0.000	0.027	0.008	0.023	0.000

continued (profile=21203)

			0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	Species No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	0.014	0.000	0.000	0.000	0.004	0.001	0.000	0.000
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.012	0.014	0.000	0.000	0.004	0.004	0.000	0.000
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.000	0.062	0.000	0.000	0.000	0.018	0.000	0.000
7440-43-9	48	CD	0.050	0.089	0.013	0.000	0.024	0.026	0.012	0.000
7440-31-5	50	SN	0.000	0.119	0.000	0.012	0.000	0.035	0.000	0.000
7440-36-0	51	SB	0.225	0.203	0.069	0.023	0.115	0.061	0.000	0.018
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.560	0.610	0.000	0.061	0.165	0.182	0.066	0.048
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	0.017	0.016	0.000	0.000	0.005	0.005	0.000	0.000
7439-92-1	82	PB	0.249	0.049	0.131	0.013	0.166	0.019	0.201	0.020
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	19.628		14.340		15.897		16.948	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Coal Dust

Profile Number:21204

Profile Data Quality:B/C

Control Device:Uncontrolled

Reference(s):43

Data Source:Fugitive dust from storage and handling. Sample sieved and resuspended.

SCC : 30510103 30510203 30510303 30510403 30510503

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	10.865	1.086	4.627	0.463	6.462	0.602	5.273	0.527
7440-21-3	14	SI	22.466	2.247	11.346	1.135	14.617	1.282	12.956	1.296
7723-14-0	15	P	0.194	0.019	0.085	NR	0.117	NE	0.097	NR
7704-34-9	16	S	0.566	0.057	0.417	0.042	0.461	0.036	0.533	0.053
7782-50-5	17	CL	0.171	0.020	0.067	NR	0.098	NE	0.086	NR
7440-09-7	19	K	0.968	0.097	0.489	0.049	0.630	0.055	0.519	0.052
7440-70-2	20	CA	3.142	0.314	3.422	0.342	3.340	0.237	4.465	0.446
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.283	0.028	0.161	0.016	0.197	0.017	0.172	0.017
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.015	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	0.013	NR	<	NR	NE	NE	1.109	0.111
7439-89-6	26	FE	1.422	0.142	<	0.094	NE	NE	<	NR
7440-48-4	27	CO	<	NR	0.945	NR	NE	NE	<	NR
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	0.022	NR	<	NR	NE	NE	0.049	NR
7440-66-6	30	ZN	0.033	NR	<	NR	NE	NE	0.041	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=21204)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.015	NR	0.015	NR	0.015	NE	0.016	NR
7440-67-7	40	PD	0.000	0.011	0.000	0.000	0.000	0.003	0.000	0.000
7440-22-4	47	AG	<	0.014	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	0.021	0.017	NR	NE	NE	0.012	NR
7440-74-6	49	IN	0.031	0.024	<	0.011	NE	NE	<	0.011
7440-31-5	50	SN	0.027	0.028	<	0.013	NE	NE	<	0.012
7440-36-0	51	SB	<	0.054	0.018	0.021	NE	NE	<	0.022
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.077	0.138	<	0.061	NE	NE	0.108	0.056
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.072	NR	0.018	NR	0.034	NE	0.044	NR
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	40.382		21.627		27.145		25.480	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Calcium Carbide Furnace

Profile Number:25201

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):46

Data Source:Sampled with a 2-stage virtual impactor with a Method 5 heated probe. Analysis by XRF,INNA,IC, and carbon oxidation. No dilution air. Average of 2 samples from same source.

SCC : 30500999

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	0.100	NA	0.200	NE	NE	NE	NE
7440-23-5	11	NA	0.920	0.100	0.430	0.050	0.596	0.062	0.596	NE
7439-95-4	12	MG	2.400	0.350	1.250	0.350	1.641	0.212	1.641	NE
7429-90-5	13	AL	0.580	0.110	0.860	0.130	0.765	0.076	0.765	NE
7440-21-3	14	SI	2.500	0.070	2.900	1.300	2.764	0.479	2.764	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	1.600	0.420	0.540	0.570	0.900	0.254	0.900	NE
7782-50-5	17	CL	1.050	0.070	0.960	0.630	0.991	0.226	0.991	NE
7440-09-7	19	K	1.250	0.350	0.480	0.300	0.742	0.169	0.742	NE
7440-70-2	20	CA	30.000	4.000	25.800	8.700	27.226	3.767	27.226	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	0.020	<	0.020	NE	NE	NE	NE
7440-62-2	23	V	<	NR	0.009	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	0.010	<	0.010	NE	NE	NE	NE
7439-96-5	25	MN	0.042	0.003	0.036	0.010	0.038	0.004	0.038	NE
7439-89-6	26	FE	0.540	0.080	0.330	0.130	0.401	0.060	0.401	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.022	0.008	0.021	0.006	0.021	0.004	0.021	NE
7440-50-8	29	CU	0.020	0.011	0.040	0.004	0.033	0.005	0.033	NE
7440-66-6	30	ZN	0.015	0.007	<	0.010	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=25201)

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	0.010	<	0.010	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.008	0.004	<	NR	NE	NE	NE	NE
	201	OC	7.300	1.300	4.500	0.780	5.451	0.659	5.451	NE
	202	EC	1.200	0.280	3.600	1.800	2.785	0.645	2.785	NE
	203	SO4	3.200	0.420	0.930	1.100	1.701	0.431	1.701	NE
	204	NO3	0.570	0.240	NA	0.500	NE	NE	NE	NE
		SUM =	53.217		42.686		46.263		46.263	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Silica Manufacturing

Profile Number:25401

Profile Data Quality:C/D

Control Device:Baghouse

Reference(s):21

Data Source:Sampled with a 2-stage virtual impactor. Analysis by XRF. Average of 3 source tests from a baghouse outlet.

SCC : 30599999

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.990	0.200	<	NR	NE	NE	NE	NE
7440-21-3	14	SI	45.320	9.120	46.360	9.270	45.448	13.955	45.448	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.140	0.030	<	NR	NE	NE	NE	NE
7782-50-5	17	CL	<	NR	<	NR	NE	NE	NE	NE
7440-09-7	19	K	0.280	0.060	<	NR	NE	NE	NE	NE
7440-70-2	20	CA	<	NR	<	NR	NE	NE	NE	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.005	0.001	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	<	NR	<	NR	NE	NE	NE	NE
7439-89-6	26	FE	0.160	0.030	0.390	0.078	0.188	0.090	0.188	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.013	0.003	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	0.003	0.001	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=25401)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	46.911		46.750		45.636		45.636	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Asphalt Roofing Manufacturing

Profile Number:25402

Profile Data Quality:C/D

Control Device:Unspecified

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones at 400 deg F. Cyclone and filter catches analyzed by XRF. Si, P and S non-quantitative. Average of 2 samples taken downstream of control system.

SCC : 30500102

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.33	[illegible].38	0.41

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	<	NR	<	NR	NE	NE	<	NR
7439-95-4	12	MG	<	NR	<	NR	NE	NE	<	NR
7429-90-5	13	AL	<	NR	<	NR	NE	NE	<	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	7.600	7.000	5.000	7.000	7.145	8.236	7.330	7.000
7782-50-5	17	CL	12.000	3.000	12.000	3.000	12.000	4.021	12.000	3.000
7440-09-7	19	K	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-70-2	20	CA	3.400	0.700	3.400	0.700	3.400	0.991	3.400	0.700
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-96-5	25	MN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-89-6	26	FE	2.100	0.300	2.100	0.300	2.100	0.493	2.100	0.300
7440-48-4	27	CO	1.800	0.300	1.800	0.300	1.800	0.459	1.800	0.300
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	<	NR	<	NR	NE	NE	<	NR
7440-66-6	30	ZN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=25402)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	201	OC	23.000	NR	23.000	NR	23.000	NE	23.000	NR
	202	EC	1.000	NR	1.000	NR	1.000	NE	1.000	NR
	203	SO4	23.000	NR	23.000	NR	23.000	NE	23.000	NR
	204	NO3	<	NR	<	NR	NE	NE	<	NR
		SUM =	76.650		74.050		76.195		76.380	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Carborundum Manufacturing

Profile Number:25406

Profile Data Quality:B/D

Control Device:Uncontrolled

Reference(s):46, 54

Data Source:Sampled with a 2-stage virtual impactor with a Method 5 heated probe. No dilution air. Analysis by XRF, INNA, IC, and carbon oxidation. Samples from roof exhaust vent. Average of 4 samples from burn cycle and bottom removal.

SCC : 30500999

Mass Fraction Data :
Size interval (um) : (0-2.5) (0-6) (0-10)
Mass Fraction : 0.39 0.48 0.55

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	0.050	0.030	NA	0.400	NE	NE	NE	NE
7440-23-5	11	NA	0.120	0.100	0.260	0.170	0.137	0.177	0.137	NE
7439-95-4	12	MG	0.780	1.200	<	0.400	NE	NE	NE	NE
7429-90-5	13	AL	0.350	0.400	2.800	4.300	0.651	3.804	0.651	NE
7440-21-3	14	SI	3.500	4.300	12.000	15	4.545	NE	4.545	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	4.800	6.600	0.410	0.310	4.260	5.826	4.260	NE
7782-50-5	17	CL	1.700	1.500	0.990	0.430	1.613	1.390	1.613	NE
7440-09-7	19	K	0.790	1.100	0.720	1.100	0.781	1.371	0.781	NE
7440-70-2	20	CA	0.140	0.130	0.570	0.490	0.193	0.451	0.193	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.014	0.019	0.033	0.490	0.016	0.430	0.016	NE
7440-62-2	23	V	0.007	0.008	0.012	0.010	0.008	0.011	0.008	NE
7440-47-3	24	CR	0.009	0.011	0.004	0.007	0.008	0.012	0.008	NE
7439-96-5	25	MN	0.035	0.041	0.029	0.025	0.034	0.042	0.034	NE
7439-89-6	26	FE	0.330	0.610	0.270	0.210	0.323	0.568	0.323	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.004	0.007	0.017	0.230	0.006	0.202	0.006	NE
7440-50-8	29	CU	0.019	0.023	0.055	0.018	0.023	0.027	0.023	NE
7440-66-6	30	ZN	0.004	0.004	<	0.010	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=25406)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.017	0.010	0.011	0.009	0.016	0.012	0.016	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	0.010	<	0.010	NE	NE	NE	NE
	201	OC	21.400	7.400	4.600	2.300	19.334	7.319	19.334	NE
	202	EC	13.670	13	24.000	15	14.940	NE	14.940	NE
	203	SO4	16.000	25	1.600	1.830	14.229	NE	14.229	NE
	204	NO3	1.600	2.100	0.830	0.480	1.505	1.902	1.505	NE
		SUM =	65.339		49.211		62.622		62.622	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Glass Furnace

Profile Number:27102

Profile Data Quality:B/D

Control Device:Uncontrolled

Reference(s):49

Data Source:Average of 3 replicate samples collected with a dilution sampler.

SCC : 30501402

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.91	0.93	0.95

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.003	0.003	0.003	NE	0.003	NE	NA	NR
7440-42-8	5	B	0.010	0.010	0.010	NE	0.010	NE	NA	NR
7782-41-4	9	F	0.027	0.006	0.027	NE	0.027	NE	0.025	0.005
7440-23-5	11	NA	12.800	1.280	12.800	NE	12.800	NE	NA	NR
7439-95-4	12	MG	0.183	0.018	0.183	NE	0.183	NE	NA	NR
7429-90-5	13	AL	0.011	0.011	0.011	NE	0.011	NE	0.028	0.010
7440-21-3	14	SI	0.320	0.060	0.320	NE	0.320	NE	0.347	0.055
7723-14-0	15	P	0.025	0.025	0.025	NE	0.025	NE	0.032	0.024
7704-34-9	16	S	17.600	1.760	17.600	NE	17.600	NE	17.512	1.751
7782-50-5	17	CL	0.016	0.003	0.016	NE	0.016	NE	0.020	0.007
7440-09-7	19	K	1.800	0.180	1.800	NE	1.800	NE	1.835	0.183
7440-70-2	20	CA	0.427	0.043	0.427	NE	0.427	NE	0.461	0.046
7440-20-2	21	SC	<	NR	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.004	NR	0.004	NE	0.004	NE	0.005	NR
7440-62-2	23	V	0.006	NR	0.006	NE	0.006	NE	0.006	NR
7440-47-3	24	CR	0.215	0.021	0.215	NE	0.215	NE	0.218	0.022
7439-96-5	25	MN	0.003	0.001	0.003	NE	0.003	NE	0.003	NR
7439-89-6	26	FE	0.026	0.003	0.026	NE	0.026	NE	0.034	0.006
7440-48-4	27	CO	0.020	0.020	0.020	NE	0.020	NE	<	NR
7440-02-0	28	NI	0.004	NR	0.004	NE	0.004	NE	0.004	NR
7440-50-8	29	CU	0.001	NR	0.001	NE	0.001	NE	0.001	NR
7440-66-6	30	ZN	0.022	0.002	0.022	NE	0.022	NE	0.023	0.002
7440-55-3	31	GA	<	NR	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NR	<	NE	<	NE	<	NR
7440-38-2	33	AS	0.023	0.002	0.023	NE	0.023	NE	0.023	0.002

continued (profile=27102)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.014	0.003	0.014	NE	0.014	NE	0.014	0.003
7726-95-6	35	BR	0.004	NR	0.004	NE	0.004	NE	0.004	NR
7440-17-7	37	RB	0.013	0.001	0.013	NE	0.013	NE	0.013	0.001
7440-24-6	38	SR	0.003	NR	0.003	NE	0.003	NE	0.003	NR
7439-98-7	42	MO	0.042	0.004	0.042	NE	0.042	NE	0.044	0.004
7440-22-4	47	AG	0.001	0.001	0.001	NE	0.001	NE	0.001	0.001
7440-43-9	48	CD	0.003	0.002	0.003	NE	0.003	NE	0.003	0.002
7440-31-5	50	SN	0.015	0.003	0.015	NE	0.015	NE	0.014	0.003
7440-36-0	51	SB	0.002	0.002	0.002	NE	0.002	NE	0.002	0.003
7440-46-2	55	CS	<	NR	<	NE	<	NE	<	NR
7440-39-3	56	BA	0.003	0.001	0.003	NE	0.003	NE	0.009	0.008
7440-45-1	58	CE	<	NR	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.195	0.019	0.195	NE	0.195	NE	0.194	0.019
	201	OC	0.710	0.080	0.710	NE	0.710	NE	1.050	0.105
	202	EC	0.062	0.080	0.062	NE	0.062	NE	0.154	0.105
	203	SO4	48.900	7.300	48.900	NE	48.900	NE	50.341	6.579
	204	NO3	0.015	0.003	0.015	NE	0.015	NE	0.018	0.006
		SUM =	83.528		83.528		83.528		72.441	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Cement Kiln (Gas-Fired)

Profile Number:27201

Profile Data Quality:D/E

Control Device:Baghouse

Reference(s):10

Data Source:SASS train with Method 5 heated probe, 3 cyclones, at 400 deg F. Cyclone and filter catches analyzed by XRF. Si, P, S non-quantitative. Average of 2 samples downstream from baghouse.

SCC : 30500606

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.45	0.79	0.84

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	2.400	0.400	<	NR	NE	NE	2.200	0.800
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	2.400	0.400	1.500	0.300	1.982	0.343	1.400	0.300
7440-70-2	20	CA	16.100	3.000	22.000	3.000	18.839	3.071	27.000	3.000
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.550	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	0.550	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	<	NR	0.550	NR	NE	NE	1.200	0.100
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	<	NR	<	NR	NE	NE	<	NR
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	<	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=27201)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	201	OC	NA	NR	2.660	NR	NE	NE	3.220	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	4.270	NR	1.680	NR	3.067	NE	1.260	NR
	204	NO3	0.550	NR	0.550	NR	0.550	NE	0.550	NR
	206	CO3	0.000	0.000	8.100	0.000	3.761	0.614	8.790	0.000
		SUM =	26.270		37.040		31.270		46.170	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Cement Kiln (Coal-Fired)

Profile Number:27203

Profile Data Quality:B/D

Control Device:ESP

Reference(s):49

Data Source:Average of 2 replicate samples from a single stack collected with a dilution sampler with a 2-stage virtual impactor.

SCC : 30500706

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.64	0.84	0.85

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.020	0.020	0.020	NE	0.020	NE	NA	NR
7440-42-8	5	B	0.050	0.050	0.050	NE	0.050	NE	NA	NR
7782-41-4	9	F	0.200	0.028	0.200	NE	0.200	NE	0.200	0.109
7440-23-5	11	NA	2.290	0.460	2.290	NE	2.290	NE	NA	NR
7439-95-4	12	MG	0.240	0.024	0.240	NE	0.240	NE	NA	NR
7429-90-5	13	AL	4.280	0.430	4.280	NE	4.280	NE	4.106	0.411
7440-21-3	14	SI	8.440	0.844	8.440	NE	8.440	NE	8.896	1.362
7723-14-0	15	P	0.017	0.075	0.017	NE	0.017	NE	0.029	0.049
7704-34-9	16	S	6.800	1.400	6.800	NE	6.800	NE	5.000	0.912
7782-50-5	17	CL	7.800	1.900	7.800	NE	7.800	NE	4.392	0.771
7440-09-7	19	K	5.400	1.500	5.400	NE	5.400	NE	3.792	0.622
7440-70-2	20	CA	10.000	1.300	10.000	NE	10.000	NE	14.800	1.480
7440-32-6	22	TI	0.298	0.036	0.298	NE	0.298	NE	0.302	0.032
7440-62-2	23	V	0.010	0.002	0.010	NE	0.010	NE	0.011	0.001
7440-47-3	24	CR	0.027	0.024	0.027	NE	0.027	NE	0.016	0.010
7439-96-5	25	MN	0.034	0.019	0.034	NE	0.034	NE	0.027	0.008
7439-89-6	26	FE	0.930	0.140	0.930	NE	0.930	NE	1.038	0.104
7440-48-4	27	CO	0.100	0.100	0.100	NE	0.100	NE	NA	NR
7440-02-0	28	NI	0.093	0.096	0.093	NE	0.093	NE	0.043	0.038
7440-50-8	29	CU	0.023	0.004	0.023	NE	0.023	NE	0.017	0.002
7440-66-6	30	ZN	0.217	0.022	0.217	NE	0.217	NE	0.203	0.020
7440-38-2	33	AS	0.004	0.010	0.004	NE	0.004	NE	0.005	0.006
7782-49-2	34	SE	0.010	0.003	0.010	NE	0.010	NE	0.009	0.002
7726-95-6	35	BR	0.020	0.006	0.020	NE	0.020	NE	0.012	0.002
7440-17-7	37	RB	0.075	0.019	0.075	NE	0.075	NE	0.055	0.008

continued (profile=27203)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-24-6	38	SR	0.032	0.003	0.032	NE	0.032	NE	0.037	0.004
7440-67-7	40	ZR	0.006	0.009	0.006	NE	0.006	NE	0.004	0.004
7439-98-7	42	MO	0.016	0.015	0.016	NE	0.016	NE	0.018	0.012
7440-05-3	46	PD	0.005	0.009	0.005	NE	0.005	NE	0.003	0.004
7440-22-4	47	AG	0.006	0.004	0.006	NE	0.006	NE	0.003	0.003
7440-43-9	48	CD	0.016	0.015	0.016	NE	0.016	NE	0.010	0.007
7440-74-6	49	IN	0.006	0.008	0.006	NE	0.006	NE	0.004	0.004
7440-31-5	50	SN	0.004	0.004	0.004	NE	0.004	NE	0.004	0.003
7440-39-3	56	BA	0.034	0.007	0.034	NE	0.034	NE	0.026	0.013
7439-91-0	57	LA	0.024	0.024	0.024	NE	0.024	NE	0.025	0.018
7439-97-6	80	HG	0.001	0.001	0.001	NE	0.001	NE	0.001	NR
7439-92-1	82	PB	1.820	0.280	1.820	NE	1.820	NE	1.346	0.136
7440-69-9	83	BI	1.000	1.000	1.000	NE	1.000	NE	NA	NR
	201	OC	5.400	0.600	5.400	NE	5.400	NE	6.654	0.665
	202	EC	0.200	0.400	0.200	NE	0.200	NE	0.188	0.288
	203	SO4	18.300	6.400	18.300	NE	18.300	NE	14.520	7.642
	204	NO3	0.200	0.040	0.200	NE	0.200	NE	0.740	0.660
		SUM =	74.448		74.448		74.448		66.536	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Gypsum Calciner

Profile Number:27501

Profile Data Quality:D/E

Control Device:Baghouse

Reference(s):10

Data Source:SASS train with Method 5 heated probe, 3 cyclones, at 400 deg. F. Cyclone and filter catches analyzed by XRF. Si, P, S non-quantitative. The one sample analyzed was taken downstream of the baghouse.

SCC : 30501501 30501520

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

	Species		0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	13.660	NR	19.000	NR	17.186	NE	18.300	NR
7782-50-5	17	CL	0.550	NR	<	NR	NE	NE	0.550	NR
7440-09-7	19	K	0.550	NR	0.050	NR	0.220	NE	0.550	NR
7440-70-2	20	CA	13.000	NR	0.900	NR	5.009	NE	12.000	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.550	NR	0.050	NR	0.220	NE	0.550	NR
7439-96-5	25	MN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7439-89-6	26	FE	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.550	NR	0.050	NR	0.220	NE	0.550	NR
7440-50-8	29	CU	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	0.050	NR	NE	NE	0.050	NR

continued (profile=27501)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7726-95-6	35	BR	0.050	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	0.050	NR	<	NR	NE	NE	0.050	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	0.050	NR	NE	NE	0.050	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.050	NR	<	NR	NE	NE	0.050	NR
	200	TC	1.000	NR	0.550	NR	0.703	NE	2.000	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	41.000	NR	57.000	NR	51.566	NE	55.000	NR
	204	NO3	0.050	NR	0.050	NR	0.050	NE	0.050	NR
	206	CO3	0.000	0.000	0.550	0.000	0.363	0.026	0.550	0.000
		SUM =	71.860		79.100		76.641		91.100	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

3.7 PETROLEUM INDUSTRY

The petroleum industry includes petroleum refining and natural gas processing. Petroleum refining involves the production of several fuels, oils, and feeds for the petrochemical industry from crude oil. Refining processes include distillation, conversion, treatment, and storage and handling processes. The most significant sources of emissions include vacuum distillation, catalytic cracking, thermal cracking, boilers, and heaters.

Profile Name:Refinery Process Heaters (Gas)

Profile Number:26101

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):10

Data Source:SASS train with heated Method 5 probe, 3 cyclones at 400 deg F. Cyclone and filter catches analyzed by XRF. Si, P, S non-quantitative. The one sample analyzed is the <1um fraction.

SCC : 30600105

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.90	0.93	0.96

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	<	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	15.600	NR	15.600	NR	15.600	NE	15.600	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	<	NR	<	NR	NE	NE	<	NR
7440-70-2	20	CA	5.000	NR	5.000	NR	5.000	NE	5.000	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7439-96-5	25	MN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7439-89-6	26	FE	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-48-4	27	CO	2.000	NR	2.000	NR	2.000	NE	2.000	NR
7440-02-0	28	NI	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-50-8	29	CU	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=26101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7726-95-6	35	BR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-67-7	40	ZR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.050	NR	0.050	NR	0.050	NE	0.050	NR
	201	OC	7.000	NR	7.000	NR	7.000	NE	7.000	NR
	202	EC	<	NR	<	NR	NE	NE	<	NR
	203	SO4	47.000	NR	47.000	NR	47.000	NE	47.000	NR
	204	NO3	0.550	NR	0.550	NR	0.550	NE	0.550	NR
		SUM =	80.200		80.200		80.200		80.200	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Petroleum Refinery Catalytic Cracker

Profile Number:26202

Profile Data Quality:B/D

Control Device:ESP

Reference(s):52

Data Source:One representative sample from a group of 9 collected with a dilution sampler.

SCC : 30600201

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.39	0.48	0.55

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	4.968	0.227	23.469	1.914	7.243	3.422	7.243	NE
7440-21-3	14	SI	11.796	0.537	50.570	4.227	16.564	7.446	16.564	NE
7723-14-0	15	P	0.000	0.074	0.000	0.315	0.000	0.284	0.000	NE
7704-34-9	16	S	4.511	0.209	2.237	0.750	4.231	0.925	4.231	NE
7782-50-5	17	CL	0.000	0.052	0.000	0.183	0.000	0.167	0.000	NE
7440-09-7	19	K	0.038	0.002	0.117	0.018	0.048	0.022	0.048	NE
7440-70-2	20	CA	0.036	0.002	0.155	0.018	0.051	0.025	0.051	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.117	0.053	0.117	0.275	0.117	0.246	0.117	NE
7440-62-2	23	V	0.000	0.023	0.000	0.121	0.000	0.108	0.000	NE
7440-47-3	24	CR	0.000	0.011	0.000	0.055	0.000	0.049	0.000	NE
7439-96-5	25	MN	0.000	0.003	0.000	0.018	0.000	0.016	0.000	NE
7439-89-6	26	FE	0.247	0.012	0.567	0.067	0.286	0.097	0.286	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.027	0.001	0.059	0.010	0.031	0.012	0.031	NE
7440-50-8	29	CU	0.003	0.000	0.005	0.004	0.003	0.004	0.003	NE
7440-66-6	30	ZN	0.005	0.000	0.012	0.003	0.006	0.003	0.006	NE
7440-55-3	31	GA	0.002	0.000	0.005	0.002	0.002	0.002	0.002	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.000	0.001	0.000	0.007	0.000	0.006	0.000	NE

continued (profile=26202)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.002	0.000	0.007	0.003	0.003	0.003	0.003	NE
7726-95-6	35	BR	0.000	0.000	0.003	0.004	0.000	0.004	0.000	NE
7440-17-7	37	RB	0.001	0.000	0.003	0.004	0.001	0.004	0.001	NE
7440-24-6	38	SR	0.005	0.000	0.006	0.005	0.005	0.004	0.005	NE
7440-67-7	40	ZR	0.000	0.002	0.026	0.025	0.003	0.022	0.003	NE
7440-22-4	47	AG	0.000	0.002	0.045	0.022	0.006	0.020	0.006	NE
7440-43-9	48	CD	0.000	0.002	0.019	0.030	0.002	0.026	0.002	NE
7440-31-5	50	SN	0.001	0.003	0.000	0.042	0.001	0.037	0.001	NE
7440-36-0	51	SB	0.002	0.005	0.000	0.080	0.002	0.070	0.002	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.000	0.012	0.308	0.196	0.038	0.176	0.038	NE
7439-91-0	57	LA	0.246	0.025	0.645	0.334	0.295	0.306	0.295	NE
7439-97-6	80	HG	0.000	0.000	0.006	0.006	0.001	0.005	0.001	NE
7439-92-1	82	PB	0.008	0.001	0.023	0.012	0.010	0.011	0.010	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	22.015		78.404		28.949		28.949	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.8 PULP AND PAPER INDUSTRY

The most common wood pulping processes include Kraft, Sulfite, Neutral Sulfite Semichemical, and Soda. Chemical wood pulping is the extraction of cellulose fiber from wood by dissolving the lignin which binds the fibers. Particulate emissions can arise when fluidized bed reactors are used to burn spent process liquor. The flue gas contains sodium sulfate and sodium carbonate dust. The paper products industry includes a variety of wood working and paper processing operations. Particulate emissions can arise from sawing and cutting operations among other processes.

Profile Name:Particle Board Dryer

Profile Number:22101

Profile Data Quality:B/D

Control Device:Multicyclones

Reference(s):45

Data Source:Average of 2 samples from one source. Glues used are <1% NaCl.

SCC : 30700703

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	3.700	4.000	0.300	0.100	3.282	3.539	3.282	NE
7439-95-4	12	MG	NA	NR	0.040	0.020	NE	NE	NE	NE
7429-90-5	13	AL	<	NR	<	NR	NE	NE	NE	NE
7440-21-3	14	SI	0.250	0.070	<	0.100	NE	NE	NE	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	1.400	0.200	0.030	0.003	1.232	0.247	1.232	NE
7782-50-5	17	CL	4.500	0.800	<	NR	NE	NE	NE	NE
7440-09-7	19	K	4.000	0.800	<	NR	NE	NE	NE	NE
7440-70-2	20	CA	0.500	0.100	0.100	0.030	0.451	0.111	0.451	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	NR	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.090	0.010	NA	NR	NE	NE	NE	NE
7439-89-6	26	FE	0.100	0.010	NA	NR	NE	NE	NE	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	0.060	0.010	NA	NR	NE	NE	NE	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=22101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	200	TC	NA	NR	58.000	17.700	NE	NE	NE	NE
	201	OC	50.000	17.000	NA	NR	NE	NE	NE	NE
	202	EC	8.000	5.000	NA	NR	NE	NE	NE	NE
	203	SO4	3.650	0.600	0.100	0.100	3.213	0.700	3.213	NE
	204	NO3	1.250	0.350	0.500	0.200	1.158	0.391	1.158	NE
		SUM =	77.500		59.070		9.336		9.336	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Particle Board Dryer

Profile Number:22102

Profile Data Quality:B/D

Control Device:Wet Scrubber

Reference(s):45

Data Source:Average of 2 samples from one source collected with a 2-stage virtual impactor. High NaCl due to salt content of resin glues.

SCC : 30700703

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	18.200	3.100	17.000	4.000	18.052	5.407	18.052	NE
7439-95-4	12	MG	<	NR	0.400	0.600	NE	NE	NE	NE
7429-90-5	13	AL	<	NR	NA	NR	NE	NE	NE	NE
7440-21-3	14	SI	0.250	0.070	1.100	0.100	0.355	0.176	0.355	NE
7723-14-0	15	P	<	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	1.000	0.400	1.900	0.500	1.111	0.622	1.111	NE
7782-50-5	17	CL	23.400	1.900	25.000	6.000	23.597	6.965	23.597	NE
7440-09-7	19	K	1.050	0.070	1.500	0.300	1.105	0.353	1.105	NE
7440-70-2	20	CA	0.200	NR	1.100	0.400	0.311	NE	0.311	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	NR	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.020	NR	<	NR	NE	NE	NE	NE
7439-89-6	26	FE	0.020	0.030	<	NR	NE	NE	NE	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE

tinued (profile=22102)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	0.020	NR	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	10.000	5.000	10.000	5.000	10.000	6.445	10.000	NE
	202	EC	1.200	0.300	1.200	0.300	1.200	0.428	1.200	NE
	203	SO4	3.650	0.070	2.200	0.500	3.472	0.690	3.472	NE
	204	NO3	1.250	0.350	0.500	0.200	1.158	0.391	1.158	NE
		SUM =	60.320		61.900		60.361		60.361	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Wood Products - Sanderdust

Profile Number:22201

Profile Data Quality:C/D

Control Device:Cyclone

Reference(s):10

Data Source:Average of 5 source tests. SASS train with heated Method 5 probe, 3 cyclones; at 400 deg F. Cyclone and filter catches analyzed by XRF. Si, P and S non-quantitative.

SCC : 30700702

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.30	0.43	0.53

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	<	NR	<	NR	NE	NE	<	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	<	NR	<	NR	NE	NE	<	NR
7440-70-2	20	CA	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7439-89-6	26	FE	<	NR	<	NR	NE	NE	<	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	<	NR	<	NR	NE	NE	<	NR
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	<	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=22201)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	201	OC	35.000	NR	35.000	NR	35.000	NE	35.000	NR
	202	EC	6.000	NR	6.000	NR	6.000	NE	6.000	NR
	203	SO4	<	NR	<	NR	NE	NE	<	NR
	204	NO3	<	NR	<	NR	NE	NE	<	NR
		SUM =	41.150		41.150		41.150		41.150	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Sawdust

Profile Number:22202

Profile Data Quality:B/D

Control Device:Uncontrolled

Reference(s):45

Data Source:Grab sample from cyclone catch. Average of 6 samples.

SCC : 30700804

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	0.240	0.100	0.240	0.100	0.240	0.131	0.240	NE
7439-95-4	12	MG	<	NR	<	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.180	0.130	0.090	0.090	0.169	0.141	0.169	NE
7440-21-3	14	SI	0.300	0.400	0.110	0.160	0.277	0.380	0.277	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	<	NR	<	NR	NE	NE	NE	NE
7782-50-5	17	CL	0.030	0.030	0.140	0.140	0.044	0.127	0.044	NE
7440-09-7	19	K	0.030	0.040	0.060	0.030	0.034	0.045	0.034	NE
7440-70-2	20	CA	0.240	0.140	0.500	0.400	0.272	0.378	0.272	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	NR	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.010	NR	0.010	NR	0.010	NE	0.010	NE
7439-89-6	26	FE	0.210	0.180	0.130	0.110	0.200	0.188	0.200	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=22202)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	50.000	3.500	48.000	5.000	49.754	10.127	49.754	NE
	202	EC	4.600	1.000	4.700	1.500	4.612	1.779	4.612	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	55.840		53.980		55.612		55.612	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Veneer Dryer

Profile Number:22301

Profile Data Quality:B/D

Control Device:Uncontrolled

Reference(s):45

Data Source:Average of 6 samples collected from 3 sources with a 2-stage virtual impactor.

SCC : 30700701

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.18	0.37	0.53

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	<	NR	<	NR	NE	NE	NE	NE
7429-90-5	13	AL	<	NR	<	NR	NE	NE	NE	NE
7440-21-3	14	SI	<	NR	<	NR	NE	NE	NE	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	<	NR	<	NR	NE	NE	NE	NE
7782-50-5	17	CL	<	NR	<	NR	NE	NE	NE	NE
7440-09-7	19	K	<	NR	<	NR	NE	NE	NE	NE
7440-70-2	20	CA	<	NR	<	NR	NE	NE	NE	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	NR	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	<	NR	<	NR	NE	NE	NE	NE
7439-89-6	26	FE	<	NR	<	NR	NE	NE	NE	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=22301)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	81.650	10	81.650	10	81.650	NE	81.650	NE
	202	EC	0.767	0.522	0.767	0.522	0.767	0.256	0.767	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	82.417		82.417		82.417		82.417	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Kraft Recovery Furnace

Profile Number:23103

Profile Data Quality:B/C

Control Device:ESP and Wet Scrubber

Reference(s):49

Data Source:Average of 4 replicate samples collected from one stack with a dilution sampler.

SCC : 30700110

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.67	0.72	0.75

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	1.859	3.100	1.859	NE	1.859	NE	1.570	2.452
7440-23-5	11	NA	25.350	13	25.350	NE	25.350	NE	26.740	10
7429-90-5	13	AL	0.473	0.430	0.473	NE	0.473	NE	0.490	0.367
7440-21-3	14	SI	0.219	0.170	0.219	NE	0.219	NE	0.311	0.187
7723-14-0	15	P	0.101	0.170	0.101	NE	0.101	NE	0.135	0.143
7704-34-9	16	S	14.440	1.800	14.440	NE	14.440	NE	14.430	1.676
7782-50-5	17	CL	1.707	0.380	1.707	NE	1.707	NE	1.700	0.334
7440-09-7	19	K	2.010	0.238	2.010	NE	2.010	NE	1.960	0.232
7440-70-2	20	CA	0.063	0.094	0.063	NE	0.063	NE	0.081	0.076
7440-32-6	22	TI	0.007	0.006	0.007	NE	0.007	NE	0.008	0.005
7440-62-2	23	V	0.002	0.002	0.002	NE	0.002	NE	0.002	0.002
7440-47-3	24	CR	0.008	0.012	0.008	NE	0.008	NE	0.016	0.010
7439-96-5	25	MN	0.010	0.012	0.010	NE	0.010	NE	0.014	0.010
7439-89-6	26	FE	0.143	0.210	0.143	NE	0.143	NE	0.147	0.168
7440-02-0	28	NI	0.025	0.052	0.025	NE	0.025	NE	0.026	0.042
7440-50-8	29	CU	0.001	0.001	0.001	NE	0.001	NE	0.004	0.004
7440-66-6	30	ZN	0.014	0.018	0.014	NE	0.014	NE	0.017	0.014
7440-38-2	33	AS	0.003	0.003	0.003	NE	0.003	NE	0.004	0.003
7782-49-2	34	SE	0.003	0.003	0.003	NE	0.003	NE	0.005	0.004
7726-95-6	35	BR	0.056	0.012	0.056	NE	0.056	NE	0.052	0.010
7440-17-7	37	RB	0.012	0.004	0.012	NE	0.012	NE	0.020	0.007
7440-24-6	38	SR	0.006	0.008	0.006	NE	0.006	NE	0.005	0.007
7440-67-7	40	ZR	0.009	0.011	0.009	NE	0.009	NE	0.021	0.023

continued (profile=23103)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7439-98-7	42	MO	0.008	0.010	0.008	NE	0.008	NE	0.010	0.010
7440-05-3	46	PD	0.015	0.019	0.015	NE	0.015	NE	0.029	0.015
7440-22-4	47	AG	0.018	0.019	0.018	NE	0.018	NE	0.020	0.022
7440-43-9	48	CD	0.013	0.015	0.013	NE	0.013	NE	0.018	0.013
7440-74-6	49	IN	0.013	0.030	0.013	NE	0.013	NE	0.039	0.061
7440-31-5	50	SN	0.017	0.020	0.017	NE	0.017	NE	0.024	0.018
7440-36-0	51	SB	0.010	0.060	0.010	NE	0.010	NE	0.026	0.059
7440-39-3	56	BA	0.097	0.115	0.097	NE	0.097	NE	0.115	0.102
7439-91-0	57	LA	0.114	0.135	0.114	NE	0.114	NE	0.218	0.217
7439-97-6	80	HG	0.001	0.003	0.001	NE	0.001	NE	0.002	0.003
7439-92-1	82	PB	0.016	0.020	0.016	NE	0.016	NE	0.026	0.017
	201	OC	1.951	0.250	1.951	NE	1.951	NE	2.567	0.320
	202	EC	0.042	0.050	0.042	NE	0.042	NE	0.142	0.132
	203	SO4	51.038	9.000	51.038	NE	51.038	NE	48.812	7.379
	204	NO3	0.101	0.170	0.101	NE	0.101	NE	0.126	0.144
		SUM =	99.975		99.975		99.975		99.932	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Lime Kiln

Profile Number:23202

Profile Data Quality:B/C

Control Device:Wet Scrubber

Reference(s):49

Data Source:Average of 3 replicate samples from a single stack using a dilution sampler with a 2-stage virtual impactor.

SCC : 30700106

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.96	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	0.038	0.007	0.038	NE	0.038	NE	1.296	0.240
7440-23-5	11	NA	36.210	4.000	36.210	NE	36.210	NE	34.680	3.681
7429-90-5	13	AL	0.064	0.074	0.064	NE	0.064	NE	0.303	0.094
7440-21-3	14	SI	0.038	0.042	0.038	NE	0.038	NE	0.200	0.056
7723-14-0	15	P	0.105	0.227	0.105	NE	0.105	NE	0.175	0.195
7704-34-9	16	S	16.520	1.780	16.520	NE	16.520	NE	16.040	1.703
7782-50-5	17	CL	2.618	0.282	2.618	NE	2.618	NE	2.630	0.326
7440-09-7	19	K	1.299	0.140	1.299	NE	1.299	NE	1.280	0.136
7440-70-2	20	CA	0.342	0.037	0.342	NE	0.342	NE	0.390	0.042
7440-32-6	22	TI	0.004	0.003	0.004	NE	0.004	NE	0.004	0.003
7440-62-2	23	V	0.068	0.007	0.068	NE	0.068	NE	0.063	0.007
7440-47-3	24	CR	0.011	0.003	0.011	NE	0.011	NE	0.015	0.004
7439-96-5	25	MN	0.015	0.003	0.015	NE	0.015	NE	0.022	0.004
7439-89-6	26	FE	0.041	0.009	0.041	NE	0.041	NE	0.066	0.012
7440-02-0	28	NI	0.032	0.005	0.032	NE	0.032	NE	0.047	0.006
7440-50-8	29	CU	0.005	0.004	0.005	NE	0.005	NE	0.006	0.004
7440-66-6	30	ZN	0.006	0.002	0.006	NE	0.006	NE	0.013	0.003
7440-38-2	33	AS	0.003	0.007	0.003	NE	0.003	NE	0.005	0.007
7782-49-2	34	SE	0.003	0.002	0.003	NE	0.003	NE	0.005	0.003
7726-95-6	35	BR	0.024	0.004	0.024	NE	0.024	NE	0.023	0.004
7440-17-7	37	RB	0.006	0.004	0.006	NE	0.006	NE	0.011	0.005
7440-24-6	38	SR	0.003	0.005	0.003	NE	0.003	NE	0.009	0.006
7440-65-5	39	Y	0.003	0.003	0.003	NE	0.003	NE	0.005	0.003

continued (profile=23202)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(c) % wt.	2.5-10 um(c) Unc.	0-10 um(c) % wt	0-10 um(c) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-67-7	40	ZR	0.012	0.012	0.012	NE	0.012	NE	0.020	0.014
7439-98-7	42	MO	0.004	0.009	0.004	NE	0.004	NE	0.033	0.019
7440-05-3	46	PD	0.006	0.006	0.006	NE	0.006	NE	0.015	0.012
7440-22-4	47	AG	0.027	0.020	0.027	NE	0.027	NE	0.068	0.025
7440-43-9	48	CD	0.015	0.015	0.015	NE	0.015	NE	0.026	0.018
7440-31-5	50	SN	0.047	0.032	0.047	NE	0.047	NE	0.069	0.038
7440-36-0	51	SB	0.019	0.019	0.019	NE	0.019	NE	0.032	0.023
7440-39-3	56	BA	0.029	0.029	0.029	NE	0.029	NE	0.049	0.035
7439-91-0	57	LA	0.099	0.107	0.099	NE	0.099	NE	0.169	0.127
7440-45-1	58	CE	0.118	0.127	0.118	NE	0.118	NE	0.201	0.151
7439-97-6	80	HG	0.002	0.004	0.002	NE	0.002	NE	0.004	0.005
7439-92-1	82	PB	0.018	0.011	0.018	NE	0.018	NE	0.023	0.013
	201	OC	9.280	1.000	9.280	NE	9.280	NE	10.120	1.724
	202	EC	0.464	0.500	0.464	NE	0.464	NE	0.576	0.481
	203	SO4	48.830	8.000	48.830	NE	48.830	NE	47.197	6.381
	204	NO3	0.092	0.100	0.092	NE	0.092	NE	0.150	0.113
		SUM =	116.520		116.520		116.520		116.040	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Sulfite Recovery Boiler

Profile Number:24101

Profile Data Quality:B/C

Control Device:Uncontrolled

Reference(s):46

Data Source:Sampled with a 2-stage virtual impactor with a Method 5 heated probe. Analysis by XRF,INNA,IC and carbon oxidation. No dilution air. Average of 2 samples from 2 plants.

SCC : 30700234

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.78	0.88	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	2.500	0.800	2.500	0.800	2.500	0.984	2.500	NE
7439-95-4	12	MG	0.730	0.520	0.730	0.520	0.730	0.597	0.730	NE
7429-90-5	13	AL	<	NR	<	NR	NE	NE	NE	NE
7440-21-3	14	SI	0.400	0.150	0.400	0.150	0.400	0.180	0.400	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	12.000	2.000	12.000	2.000	12.000	2.952	12.000	NE
7782-50-5	17	CL	0.580	0.100	0.580	0.100	0.580	0.146	0.580	NE
7440-09-7	19	K	30.000	10	30.000	10	30.000	NE	30.000	NE
7440-70-2	20	CA	2.000	0.200	2.000	0.200	2.000	0.390	2.000	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.010	0.001	0.010	0.001	0.010	0.002	0.010	NE
7440-62-2	23	V	<	0.001	<	0.001	NE	NE	NE	NE
7440-47-3	24	CR	<	0.001	<	0.001	NE	NE	NE	NE
7439-96-5	25	MN	0.054	0.070	0.054	0.070	0.054	0.079	0.054	NE
7439-89-6	26	FE	0.066	0.036	0.066	0.036	0.066	0.042	0.066	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	0.001	<	0.001	NE	NE	NE	NE
7440-50-8	29	CU	0.016	0.017	0.016	0.017	0.016	0.019	0.016	NE
7440-66-6	30	ZN	0.017	0.002	0.017	0.002	0.017	0.004	0.017	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=24101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	0.030	<	0.030	NE	NE	NE	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	56.000	11	56.000	11	56.000	NE	56.000	NE
	204	NO3	0.300	0.060	0.300	0.060	0.300	0.083	0.300	NE
		SUM =	104.673		104.673		104.673		104.673	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.9 SURFACE COATING OPERATIONS

Surface coating operations primarily involve the application of paint, varnish/shellac, lacquer, enamel, or paint primer for surface decoration and/or protection before products are marketed. Adhesives, as the name implies, involve the application of a bonding agent for the purpose of adhering materials together. A number of basic industrial coating operations are utilized, including spraying, flowcoating, roller coating, dipping, and electro-coating. There are variations and combinations of these operations, each designed for a special task. The coatings applied in these operations vary widely as to composition and physical properties. In order to accelerate the drying of the solvents used in the surface coatings, a drying or baking operation is usually an integral part of the basic coating process.

Profile Name:Paint Spray Booth

Profile Number:25403

Profile Data Quality:D/E

Control Device:Water Spray Booth

Reference(s):10

Data Source:SASS train with Method 5 probe, 3 cyclones at 400 deg F. Cyclone and filter catches analyzed by XRF. Si,P,and S non-quantitative. Analysis of one sample downstream of control device. Carbon value estimated.

SCC : 40200101

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.29	0.38	0.47

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	NR	NR	NR	NR	NE	NE	NR	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	0.660	NR	0.660	NR	0.660	NE	0.660	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	<	NR	<	NR	NE	NE	<	NR
7440-70-2	20	CA	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	3.000	NR	3.000	NR	3.000	NE	3.000	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	0.550	NR	0.550	NR	0.550	NE	0.550	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-50-8	29	CU	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=25403)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	0.050	NR	0.050	NR	0.050	NE	0.050	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	201	OC	40.000	NR	40.000	NR	40.000	NE	40.000	NR
	202	EC	10.000	NR	10.000	NR	10.000	NE	10.000	NR
	203	SO4	2.000	NR	2.000	NR	2.000	NE	2.000	NR
	204	NO3	0.050	NR	0.050	NR	0.050	NE	0.050	NR
		SUM =	57.110		57.110		57.110		57.110	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.10 SOLID WASTE DISPOSAL

Solid waste sources can be industrial, urban, agricultural, or construction. Solid waste may be disposed of in landfills or land application units or incinerated. A large percentage of urban and industrial waste is burned. Waste burning processes include open burning and controlled and uncontrolled incineration where significant particulate emissions may be generated.

Profile Name:Municipal Incinerator (Philadelphia)

Profile Number:17105

Profile Data Quality:B/D

Control Device:ESP(Inoperative)

Reference(s):52

Data Source:Dilution sampler. Representative sample from group of 10.

SCC : 50100101

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.26	0.31	0.38

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.819	0.117	5.827	0.466	2.400	0.657	2.400	NE
7440-21-3	14	SI	1.442	0.067	8.570	0.581	3.693	0.931	3.693	NE
7723-14-0	15	P	0.543	0.098	0.894	0.299	0.654	0.238	0.654	NE
7704-34-9	16	S	1.906	0.301	3.487	0.601	2.405	0.599	2.405	NE
7782-50-5	17	CL	21.299	0.985	16.678	2.218	19.840	3.100	19.840	NE
7440-09-7	19	K	6.464	0.305	4.491	0.640	5.841	0.903	5.841	NE
7440-70-2	20	CA	0.223	0.030	5.870	0.381	2.006	0.626	2.006	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.012	0.003	1.097	0.069	0.355	0.116	0.355	NE
7440-62-2	23	V	0.000	0.001	0.024	0.008	0.008	0.006	0.008	NE
7440-47-3	24	CR	0.015	0.001	0.111	0.009	0.045	0.012	0.045	NE
7439-96-5	25	MN	0.018	0.001	0.091	0.008	0.041	0.011	0.041	NE
7439-89-6	26	FE	0.279	0.013	1.874	0.129	0.783	0.204	0.783	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.032	0.002	0.085	0.010	0.049	0.011	0.049	NE
7440-50-8	29	CU	0.148	0.007	0.053	0.015	0.118	0.019	0.118	NE
7440-66-6	30	ZN	11.503	0.525	4.012	0.918	9.137	1.383	9.137	NE
7440-55-3	31	GA	0.016	0.011	0.000	0.022	0.011	0.017	0.011	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.000	0.031	0.000	0.071	0.000	0.053	0.000	NE

continued (profile=17105)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	0.003	0.011	0.003	0.020	0.003	0.016	0.003	NE
7726-95-6	35	BR	0.563	0.027	0.375	0.057	0.504	0.078	0.504	NE
7440-17-7	37	RB	0.016	0.002	0.005	0.008	0.013	0.006	0.013	NE
7440-24-6	38	SR	0.009	0.002	0.023	0.008	0.013	0.006	0.013	NE
7440-67-7	40	ZR	0.000	0.014	0.000	0.039	0.000	0.028	0.000	NE
7439-98-7	42	MO	0.036	0.003	0.003	0.023	0.026	0.016	0.026	NE
7440-43-9	48	CD	0.284	0.016	0.024	0.049	0.202	0.045	0.202	NE
7440-31-5	50	SN	0.829	0.041	0.004	0.089	0.568	0.105	0.568	NE
7440-36-0	51	SB	0.442	0.028	0.086	0.113	0.330	0.091	0.330	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.020	0.029	0.000	0.242	0.014	0.167	0.014	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	0.009	0.004	0.011	0.012	0.010	0.009	0.010	NE
7439-92-1	82	PB	8.116	0.371	2.428	0.633	6.320	0.961	6.320	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	55.046		56.126		55.389		55.389	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Municipal Incinerator Composite

Profile Number:17106

Profile Data Quality:B/E

Control Device:ESP, Baghouse, and Scrubbers

Reference(s):Not specified

Data Source:Composite profiles of 17101,17102,17103, and 17104. (Note: These profiles were not included in the Receptor Model Source Composition Library.)

SCC : 50100101

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.26	0.31	0.38

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NR
7440-23-5	11	NA	9.550	NE	9.550	NE	9.550	NE	9.550	1.800
7439-95-4	12	MG	1.420	NE	1.420	NE	1.420	NE	1.420	1.150
7429-90-5	13	AL	1.170	NE	1.170	NE	1.170	NE	1.170	0.590
7440-21-3	14	SI	<	NE	<	NE	<	NE	<	NR
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	4.300	NE	4.300	NE	4.300	NE	4.300	7.500
7782-50-5	17	CL	22.300	NE	22.300	NE	22.300	NE	22.300	4.300
7440-09-7	19	K	5.000	NE	5.000	NE	5.000	NE	5.000	1
7440-70-2	20	CA	0.767	NE	0.767	NE	0.767	NE	0.767	1.330
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.193	NE	0.193	NE	0.193	NE	0.193	0.127
7440-62-2	23	V	0.000	NE	0.000	NE	0.000	NE	0.000	0.001
7440-47-3	24	CR	0.036	NE	0.036	NE	0.036	NE	0.036	0.023
7439-96-5	25	MN	0.083	NE	0.083	NE	0.083	NE	0.083	0.062
7439-89-6	26	FE	0.627	NE	0.627	NE	0.627	NE	0.627	0.286
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	0.014	NE	0.014	NE	0.014	NE	0.014	0.006
7440-50-8	29	CU	0.180	NE	0.180	NE	0.180	NE	0.180	0.017
7440-66-6	30	ZN	11.800	NE	11.800	NE	11.800	NE	11.800	0.350
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	0.020	NE	0.020	NE	0.020	NE	0.020	0.004

continued (profile=17106)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	0.166	NE	0.166	NE	0.166	NE	0.166	0.097
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	0.025	NE	0.025	NE	0.025	NE	0.025	0.023
7440-43-9	48	CD	0.115	NE	0.115	NE	0.115	NE	0.115	0.047
7440-31-5	50	SN	0.885	NE	0.885	NE	0.885	NE	0.885	0.577
7440-36-0	51	SB	0.168	NE	0.168	NE	0.168	NE	0.168	0.078
7440-46-2	55	CS	0.004	NE	0.004	NE	0.004	NE	0.004	0.004
7440-39-3	56	BA	0.007	NE	0.007	NE	0.007	NE	0.007	0.010
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	5.330	NE	5.330	NE	5.330	NE	5.330	9.230
7439-92-1	82	PB	8.230	NE	8.230	NE	8.230	NE	8.230	1.400
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	72.390		72.390		72.390		72.390	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Sewage Sludge Incineration - Composite

Profile Number:17120

Profile Data Quality:D

Control Device:Scrubber

Reference(s):60

Data Source:Composite of profiles 17121, 17122, 17123, and 17124.

SCC : 50100506

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.24	0.32	0.42

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NE	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NE	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NE	NR	NE	NR	NR
7440-23-5	11	NA	1.410	NE	1.410	NE	1.410	NE	1.410	NR
7439-95-4	12	MG	0.650	NE	0.650	NE	0.650	NE	0.650	NR
7429-90-5	13	AL	1.800	NE	1.800	NE	1.800	NE	1.800	NR
7440-21-3	14	SI	4.770	NE	4.770	NE	4.770	NE	4.770	NR
7723-14-0	15	P	3.260	NE	3.260	NE	3.260	NE	3.260	NR
7704-34-9	16	S	6.330	NE	6.330	NE	6.330	NE	6.330	NR
7782-50-5	17	CL	1.480	NE	1.480	NE	1.480	NE	1.480	NR
7440-09-7	19	K	0.960	NE	0.960	NE	0.960	NE	0.960	NR
7440-70-2	20	CA	5.070	NE	5.070	NE	5.070	NE	5.070	NR
7440-20-2	21	SC	NR	NE	NR	NE	NR	NE	NR	NR
7440-32-6	22	TI	0.440	NE	0.440	NE	0.440	NE	0.440	NR
7440-62-2	23	V	0.180	NE	0.180	NE	0.180	NE	0.180	NR
7440-47-3	24	CR	0.580	NE	0.580	NE	0.580	NE	0.580	NR
7439-96-5	25	MN	0.210	NE	0.210	NE	0.210	NE	0.210	NR
7439-89-6	26	FE	5.380	NE	5.380	NE	5.380	NE	5.380	NR
7440-48-4	27	CO	NR	NE	NR	NE	NR	NE	NR	NR
7440-02-0	28	NI	NR	NE	NR	NE	NR	NE	NR	NR
7440-50-8	29	CU	0.880	NE	0.880	NE	0.880	NE	0.880	NR
7440-66-6	30	ZN	0.361	NE	0.361	NE	0.361	NE	0.361	NR
7440-55-3	31	GA	NR	NE	NR	NE	NR	NE	NR	NR
7440-56-4	32	GE	NR	NE	NR	NE	NR	NE	NR	NR
7440-38-2	33	AS	NR	NE	NR	NE	NR	NE	NR	NR

continued (profile=17120)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.150	NE	0.150	NE	0.150	NE	0.150	NR
7726-95-6	35	BR	0.380	NE	0.380	NE	0.380	NE	0.380	NR
7440-17-7	37	RB	NR	NE	NR	NE	NR	NE	NR	NR
7440-24-6	38	SR	NR	NE	NR	NE	NR	NE	NR	NR
7440-67-7	40	ZR	NR	NE	NR	NE	NR	NE	NR	NR
7439-98-7	42	MO	NR	NE	NR	NE	NR	NE	NR	NR
7440-43-9	48	CD	0.830	NE	0.830	NE	0.830	NE	0.830	NR
7440-31-5	50	SN	1.390	NE	1.390	NE	1.390	NE	1.390	NR
7440-36-0	51	SB	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-46-2	55	CS	NR	NE	NR	NE	NR	NE	NR	NR
7440-39-3	56	BA	0.270	NE	0.270	NE	0.270	NE	0.270	NR
7440-45-1	58	CE	NR	NE	NR	NE	NR	NE	NR	NR
7439-97-6	80	HG	NR	NE	NR	NE	NR	NE	NR	NR
7439-92-1	82	PB	2.940	NE	2.940	NE	2.940	NE	2.940	NR
	201	OC	NR	NE	NR	NE	NR	NE	NR	NR
	202	EC	NR	NE	NR	NE	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NE	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NE	NR	NE	NR	NR
		SUM =	39.771		39.771		39.771		39.771	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Sewage Sludge Incineration

Profile Number:17121

Profile Data Quality:D

Control Device:Scrubber

Reference(s):60

Data Source:Samples collected with a modified EPA Method 5 train were analyzed by X-ray fluorescence for elemental composition. Particle size distribution data were collected by cascade impactors. Data reflect average of tests conducted at a seven-chambered multiple-hearth furnace.

SCC : 50100506

Mass Fraction Data :

		(0-2.5)	(0-6)	(0-10)
Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.32	0.35	0.40

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NE	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NE	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NE	NR	NE	NR	NR
7440-23-5	11	NA	2.760	NE	2.760	NE	2.760	NE	2.760	NR
7439-95-4	12	MG	0.710	NE	0.710	NE	0.710	NE	0.710	NR
7429-90-5	13	AL	1.020	NE	1.020	NE	1.020	NE	1.020	NR
7440-21-3	14	SI	4.690	NE	4.690	NE	4.690	NE	4.690	NR
7723-14-0	15	P	4.690	NE	4.690	NE	4.690	NE	4.690	NR
7704-34-9	16	S	5.250	NE	5.250	NE	5.250	NE	5.250	NR
7782-50-5	17	CL	1.800	NE	1.800	NE	1.800	NE	1.800	NR
7440-09-7	19	K	1.710	NE	1.710	NE	1.710	NE	1.710	NR
7440-70-2	20	CA	6.200	NE	6.200	NE	6.200	NE	6.200	NR
7440-20-2	21	SC	NR	NE	NR	NE	NR	NE	NR	NR
7440-32-6	22	TI	0.220	NE	0.220	NE	0.220	NE	0.220	NR
7440-62-2	23	V	0.280	NE	0.280	NE	0.280	NE	0.280	NR
7440-47-3	24	CR	0.770	NE	0.770	NE	0.770	NE	0.770	NR
7439-96-5	25	MN	0.210	NE	0.210	NE	0.210	NE	0.210	NR
7439-89-6	26	FE	2.910	NE	2.910	NE	2.910	NE	2.910	NR
7440-48-4	27	CO	NR	NE	NR	NE	NR	NE	NR	NR
7440-02-0	28	NI	NR	NE	NR	NE	NR	NE	NR	NR
7440-50-8	29	CU	NR	NE	NR	NE	NR	NE	NR	NR
7440-66-6	30	ZN	6.440	NE	6.440	NE	6.440	NE	6.440	NR
7440-55-3	31	GA	NR	NE	NR	NE	NR	NE	NR	NR
7440-56-4	32	GE	NR	NE	NR	NE	NR	NE	NR	NR
7440-38-2	33	AS	NR	NE	NR	NE	NR	NE	NR	NR

continued (profile=17121)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	NR	NE	NR	NE	NR	NE	NR	NR
7726-95-6	35	BR	NR	NE	NR	NE	NR	NE	NR	NR
7440-17-7	37	RB	NR	NE	NR	NE	NR	NE	NR	NR
7440-24-6	38	SR	NR	NE	NR	NE	NR	NE	NR	NR
7440-67-7	40	ZR	NR	NE	NR	NE	NR	NE	NR	NR
7439-98-7	42	MO	NR	NE	NR	NE	NR	NE	NR	NR
7440-43-9	48	CD	0.330	NE	0.330	NE	0.330	NE	0.330	NR
7440-31-5	50	SN	1.420	NE	1.420	NE	1.420	NE	1.420	NR
7440-36-0	51	SB	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-46-2	55	CS	NR	NE	NR	NE	NR	NE	NR	NR
7440-39-3	56	BA	0.080	NE	0.080	NE	0.080	NE	0.080	NR
7440-45-1	58	CE	NR	NE	NR	NE	NR	NE	NR	NR
7439-97-6	80	HG	NR	NE	NR	NE	NR	NE	NR	NR
7439-92-1	82	PB	4.070	NE	4.070	NE	4.070	NE	4.070	NR
	201	OC	NR	NE	NR	NE	NR	NE	NR	NR
	202	EC	NR	NE	NR	NE	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NE	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NE	NR	NE	NR	NR
		SUM =	45.610		45.610		45.610		45.610	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Sewage Sludge Incineration

Profile Number:17122

Profile Data Quality:D

Control Device:Scrubber

Reference(s):60

Data Source:Samples collected with a modified EPA Method 5 train were analyzed by X-ray fluorescence for elemental composition. Particle size distribution data were collected by cascade impactors. Data reflect average of tests conducted at a eight-chambered multiple-hearth furnace.

SCC : 50100506

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.24	0.32	0.42

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NE	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NE	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NE	NR	NE	NR	NR
7440-23-5	11	NA	0.570	NE	0.570	NE	0.570	NE	0.570	NR
7439-95-4	12	MG	0.860	NE	0.860	NE	0.860	NE	0.860	NR
7429-90-5	13	AL	3.050	NE	3.050	NE	3.050	NE	3.050	NR
7440-21-3	14	SI	8.130	NE	8.130	NE	8.130	NE	8.130	NR
7723-14-0	15	P	3.360	NE	3.360	NE	3.360	NE	3.360	NR
7704-34-9	16	S	1.800	NE	1.800	NE	1.800	NE	1.800	NR
7782-50-5	17	CL	0.260	NE	0.260	NE	0.260	NE	0.260	NR
7440-09-7	19	K	0.890	NE	0.890	NE	0.890	NE	0.890	NR
7440-70-2	20	CA	5.090	NE	5.090	NE	5.090	NE	5.090	NR
7440-20-2	21	SC	NR	NE	NR	NE	NR	NE	NR	NR
7440-32-6	22	TI	0.880	NE	0.880	NE	0.880	NE	0.880	NR
7440-62-2	23	V	0.070	NE	0.070	NE	0.070	NE	0.070	NR
7440-47-3	24	CR	0.940	NE	0.940	NE	0.940	NE	0.940	NR
7439-96-5	25	MN	0.160	NE	0.160	NE	0.160	NE	0.160	NR
7439-89-6	26	FE	13.750	NE	13.750	NE	13.750	NE	13.750	NR
7440-48-4	27	CO	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-02-0	28	NI	0.240	NE	0.240	NE	0.240	NE	0.240	NR
7440-50-8	29	CU	1.580	NE	1.580	NE	1.580	NE	1.580	NR
7440-66-6	30	ZN	3.580	NE	3.580	NE	3.580	NE	3.580	NR
7440-55-3	31	GA	NR	NE	NR	NE	NR	NE	NR	NR
7440-56-4	32	GE	NR	NE	NR	NE	NR	NE	NR	NR
7440-38-2	33	AS	NR	NE	NR	NE	NR	NE	NR	NR

continued (profile=17122)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.040	NE	0.040	NE	0.040	NE	0.040	NR
7726-95-6	35	BR	0.110	NE	0.110	NE	0.110	NE	0.110	NR
7440-17-7	37	RB	NR	NE	NR	NE	NR	NE	NR	NR
7440-24-6	38	SR	NR	NE	NR	NE	NR	NE	NR	NR
7440-67-7	40	ZR	NR	NE	NR	NE	NR	NE	NR	NR
7439-98-7	42	MO	NR	NE	NR	NE	NR	NE	NR	NR
7440-43-9	48	CD	0.070	NE	0.070	NE	0.070	NE	0.070	NR
7440-31-5	50	SN	2.390	NE	2.390	NE	2.390	NE	2.390	NR
7440-36-0	51	SB	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-46-2	55	CS	NR	NE	NR	NE	NR	NE	NR	NR
7440-39-3	56	BA	0.560	NE	0.560	NE	0.560	NE	0.560	NR
7440-45-1	58	CE	NR	NE	NR	NE	NR	NE	NR	NR
7439-97-6	80	HG	NR	NE	NR	NE	NR	NE	NR	NR
7439-92-1	82	PB	2.270	NE	2.270	NE	2.270	NE	2.270	NR
	201	OC	NR	NE	NR	NE	NR	NE	NR	NR
	202	EC	NR	NE	NR	NE	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NE	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NE	NR	NE	NR	NR
		SUM =	50.750		50.750		50.750		50.750	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Sewage Sludge Incineration

Profile Number:17123

Profile Data Quality:D

Control Device:Scrubber

Reference(s):60

Data Source:Samples collected with a modified EPA Method 5 train were analyzed by X-ray fluorescence for elemental composition. Particle size distribution data were collected by cascade impactors. Data reflect average of tests at a fluidized bed furnace.

SCC : 50100506

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.24	0.32	0.42

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NE	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NE	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NE	NR	NE	NR	NR
7440-23-5	11	NA	1.960	NE	1.960	NE	1.960	NE	1.960	NR
7439-95-4	12	MG	1.010	NE	1.010	NE	1.010	NE	1.010	NR
7429-90-5	13	AL	3.070	NE	3.070	NE	3.070	NE	3.070	NR
7440-21-3	14	SI	5.330	NE	5.330	NE	5.330	NE	5.330	NR
7723-14-0	15	P	4.140	NE	4.140	NE	4.140	NE	4.140	NR
7704-34-9	16	S	14.420	NE	14.420	NE	14.420	NE	14.420	NR
7782-50-5	17	CL	0.930	NE	0.930	NE	0.930	NE	0.930	NR
7440-09-7	19	K	1.070	NE	1.070	NE	1.070	NE	1.070	NR
7440-70-2	20	CA	8.760	NE	8.760	NE	8.760	NE	8.760	NR
7440-20-2	21	SC	NR	NE	NR	NE	NR	NE	NR	NR
7440-32-6	22	TI	0.650	NE	0.650	NE	0.650	NE	0.650	NR
7440-62-2	23	V	0.180	NE	0.180	NE	0.180	NE	0.180	NR
7440-47-3	24	CR	0.280	NE	0.280	NE	0.280	NE	0.280	NR
7439-96-5	25	MN	0.460	NE	0.460	NE	0.460	NE	0.460	NR
7439-89-6	26	FE	4.520	NE	4.520	NE	4.520	NE	4.520	NR
7440-48-4	27	CO	NR	NE	NR	NE	NR	NE	NR	NR
7440-02-0	28	NI	NR	NE	NR	NE	NR	NE	NR	NR
7440-50-8	29	CU	0.280	NE	0.280	NE	0.280	NE	0.280	NR
7440-66-6	30	ZN	1.720	NE	1.720	NE	1.720	NE	1.720	NR
7440-55-3	31	GA	NR	NE	NR	NE	NR	NE	NR	NR
7440-56-4	32	GE	NR	NE	NR	NE	NR	NE	NR	NR
7440-38-2	33	AS	NR	NE	NR	NE	NR	NE	NR	NR

continued (profile=17123)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.360	NE	0.360	NE	0.360	NE	0.360	NR
7726-95-6	35	BR	0.770	NE	0.770	NE	0.770	NE	0.770	NR
7440-17-7	37	RB	NR	NE	NR	NE	NR	NE	NR	NR
7440-24-6	38	SR	NR	NE	NR	NE	NR	NE	NR	NR
7440-67-7	40	ZR	NR	NE	NR	NE	NR	NE	NR	NR
7439-98-7	42	MO	NR	NE	NR	NE	NR	NE	NR	NR
7440-43-9	48	CD	0.130	NE	0.130	NE	0.130	NE	0.130	NR
7440-31-5	50	SN	0.590	NE	0.590	NE	0.590	NE	0.590	NR
7440-36-0	51	SB	NR	NE	NR	NE	NR	NE	NR	NR
7440-46-2	55	CS	NR	NE	NR	NE	NR	NE	NR	NR
7440-39-3	[illegible]	BA	0.400	NE	0.400	NE	0.400	NE	0.400	NR
7440-45-1	[illegible]	CE	NR	NE	NR	NE	NR	NE	NR	NR
7439-97-6	[illegible]	HG	NR	NE	NR	NE	NR	NE	NR	NR
7439-92-1	[illegible]	PB	2.260	NE	2.260	NE	2.260	NE	2.260	NR
	201	OC	NR	NE	NR	NE	NR	NE	NR	NR
	202	EC	NR	NE	NR	NE	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NE	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NE	NR	NE	NR	NR
		SUM =	53.290		53.290		53.290		53.290	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Sewage Sludge Incineration

Profile Number:17124

Profile Data Quality:D

Control Device:Scrubber

Reference(s):60

Data Source:Samples collected with a modified EPA Method 5 train were analyzed by X-ray fluorescence for elemental composition. Particle size distribution dta were collected by cascade impactors. Data reflect average of tests conducted at a seven-chambered multiple-hearth furnace.

SCC : 50100506

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.24	0.37	0.56

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NE	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NE	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NE	NR	NE	NR	NR
7440-23-5	11	NA	0.340	NE	0.340	NE	0.340	NE	0.340	NR
7439-95-4	12	MG	0.030	NE	0.030	NE	0.030	NE	0.030	NR
7429-90-5	13	AL	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-21-3	14	SI	0.910	NE	0.910	NE	0.910	NE	0.910	NR
7723-14-0	15	P	0.840	NE	0.840	NE	0.840	NE	0.840	NR
7704-34-9	16	S	3.830	NE	3.830	NE	3.830	NE	3.830	NR
7782-50-5	17	CL	2.910	NE	2.910	NE	2.910	NE	2.910	NR
7440-09-7	19	K	0.180	NE	0.180	NE	0.180	NE	0.180	NR
7440-70-2	20	CA	0.230	NE	0.230	NE	0.230	NE	0.230	NR
7440-20-2	21	SC	NR	NE	NR	NE	NR	NE	NR	NR
7440-32-6	22	TI	0.020	NE	0.020	NE	0.020	NE	0.020	NR
7440-62-2	23	V	NR	NE	NR	NE	NR	NE	NR	NR
7440-47-3	24	CR	0.330	NE	0.330	NE	0.330	NE	0.330	NR
7439-96-5	25	MN	0.010	NE	0.010	NE	0.010	NE	0.010	NR
7439-89-6	26	FE	0.340	NE	0.340	NE	0.340	NE	0.340	NR
7440-48-4	27	CO	NR	NE	NR	NE	NR	NE	NR	NR
7440-02-0	28	NI	NR	NE	NR	NE	NR	NE	NR	NR
7440-50-8	29	CU	0.770	NE	0.770	NE	0.770	NE	0.770	NR
7440-66-6	30	ZN	2.690	NE	2.690	NE	2.690	NE	2.690	NR
7440-55-3	31	GA	NR	NE	NR	NE	NR	NE	NR	NR
7440-56-4	32	GE	NR	NE	NR	NE	NR	NE	NR	NR
7440-38-2	33	AS	NR	NE	NR	NE	NR	NE	NR	NR

continued (profile=17124)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.040	NE	0.040	NE	0.040	NE	0.040	NR
7726-95-6	35	BR	0.260	NE	0.260	NE	0.260	NE	0.260	NR
7440-17-7	37	RB	NR	NE	NR	NE	NR	NE	NR	NR
7440-24-6	38	SR	NR	NE	NR	NE	NR	NE	NR	NR
7440-67-7	40	ZR	NR	NE	NR	NE	NR	NE	NR	NR
7439-98-7	42	MO	NR	NE	NR	NE	NR	NE	NR	NR
7440-43-9	48	CD	2.770	NE	2.770	NE	2.770	NE	2.770	NR
7440-31-5	50	SN	1.160	NE	1.160	NE	1.160	NE	1.160	NR
7440-36-0	51	SB	0.060	NE	0.060	NE	0.060	NE	0.060	NR
7440-46-2	55	CS	NR	NE	NR	NE	NR	NE	NR	NR
7440-39-3	56	BA	0.020	NE	0.020	NE	0.020	NE	0.020	NR
7440-45-1	58	CE	NR	NE	NR	NE	NR	NE	NR	NR
7439-97-6	80	HG	NR	NE	NR	NE	NR	NE	NR	NR
7439-92-1	82	PB	3.140	NE	3.140	NE	3.140	NE	3.140	NR
	201	OC	NR	NE	NR	NE	NR	NE	NR	NR
	202	EC	NR	NE	NR	NE	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NE	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NE	NR	NE	NR	NR
		SUM =	20.930		20.930		20.930		20.930	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.11 UNPAVED ROADS

Dust particles can become airborne on unpaved roads by vehicular traffic and wind action can increase the activity. Particulate emissions on unpaved roads can be controlled to some degree by chemical stabilizers.

Profile Name:Unpaved Road Dust (Copper Mine)

Profile Number:41201

Profile Data Quality:D/E

Control Device:Not applicable

Reference(s):44

Data Source:Bulk sample sieved and resuspended.

SCC : 55

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.30	0.59	0.73

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	<	NR	<	NR	NE	NE	NE	NE
7429-90-5	13	AL	14.618	1.462	10.448	1.045	12.288	1.373	12.288	NE
7440-21-3	14	SI	28.738	2.874	22.471	2.247	25.236	2.788	25.236	NE
7723-14-0	15	P	0.282	0.028	0.218	0.022	0.246	0.027	0.246	NE
7704-34-9	16	S	1.532	0.153	1.817	0.182	1.691	0.182	1.691	NE
7782-50-5	17	CL	0.215	0.021	0.185	0.018	0.198	0.021	0.198	NE
7440-09-7	19	K	3.204	0.320	3.097	0.310	3.144	0.340	3.144	NE
7440-70-2	20	CA	3.420	0.342	4.028	0.403	3.760	0.404	3.760	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.331	0.033	0.402	0.040	0.371	0.040	0.371	NE
7440-62-2	23	V	0.030	NR	0.031	NR	0.031	NE	0.031	NE
7440-47-3	24	CR	0.025	NR	0.023	NR	0.024	NE	0.024	NE
7439-96-5	25	MN	0.186	0.019	0.160	0.016	0.171	0.019	0.171	NE
7439-89-6	26	FE	4.371	0.437	4.441	0.444	4.410	0.476	4.410	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	0.012	NR	NE	NE	NE	NE
7440-50-8	29	CU	1.436	0.144	1.431	0.143	1.433	0.155	1.433	NE
7440-66-6	30	ZN	0.535	0.053	0.546	0.055	0.541	0.058	0.541	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.046	NR	0.065	NR	0.057	NE	0.057	NE

continued (profile=41201)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	0.019	NR	NE	NE	NE	NE
7440-24-6	38	SR	0.024	NR	0.034	NR	0.030	NE	0.030	NE
7440-65-5	39	Y	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7439-98-7	42	MO	<	NR	0.029	NR	NE	NE	NE	NE
7440-05-3	46	PD	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-74-6	49	IN	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	0.016	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	0.012	0.023	0.022	NE	NE	NE	NE
7439-91-0	57	LA	NA	NR	NA	NR	NE	NE	NE	NE
7439-97-6	80	HG	NA	NR	NA	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.117	0.012	0.100	NR	0.107	NE	0.107	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	59.110		49.580		53.785		53.785	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Unpaved Road Dust - Haul Road

Profile Number:41203

Profile Data Quality:D/E

Control Device:Not applicable

Reference(s):44

Data Source:Sampled near a copper ore concentrator. Bulk sample sieved and resuspended.

SCC : 55

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.30	0.59	0.73

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	17.765	1.776	12.872	1.287	15.031	1.676	15.031	NE
7440-21-3	14	SI	34.358	3.436	25.981	2.598	29.677	3.292	29.677	NE
7723-14-0	15	P	0.427	0.043	0.241	0.024	0.323	0.038	0.323	NE
7704-34-9	16	S	2.810	0.281	2.277	0.228	2.512	0.276	2.512	NE
7782-50-5	17	CL	0.726	0.073	0.496	0.050	0.597	0.067	0.597	NE
7440-09-7	19	K	3.504	0.350	3.554	0.355	3.532	0.381	3.532	NE
7440-70-2	20	CA	1.128	0.113	1.671	0.167	1.431	0.154	1.431	NE
7440-32-6	22	TI	0.420	0.042	0.501	0.050	0.465	0.050	0.465	NE
7440-62-2	23	V	0.035	NR	0.035	NR	0.035	NE	0.035	NE
7440-47-3	24	CR	0.027	NR	0.021	NR	0.024	NE	0.024	NE
7439-96-5	25	MN	0.288	0.029	0.255	0.025	0.270	0.029	0.270	NE
7439-89-6	26	FE	4.364	0.436	3.779	0.378	4.037	0.441	4.037	NE
7440-02-0	28	NI	0.012	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	1.393	0.139	0.989	0.099	1.167	0.130	1.167	NE
7440-66-6	30	ZN	0.568	0.057	0.504	0.050	0.532	0.058	0.532	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.030	NR	0.016	NR	0.022	NE	0.022	NE
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.014	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	0.020	NR	NE	NE	NE	NE

continued (profile=41203)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-24-6	38	SR	0.029	NR	0.029	NR	0.029	NE	0.029	NE
7440-65-5	39	Y	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-05-3	46	PD	<	0.017	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	0.024	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	0.034	0.036	<	NR	NE	NE	NE	NE
7440-74-6	49	IN	0.045	0.038	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	0.044	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	0.080	<	0.018	NE	NE	NE	NE
7440-39-3	56	BA	0.274	0.214	0.064	0.049	0.157	0.098	0.157	NE
7439-91-0	57	LA	<	NR	<	0.076	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.170	0.018	0.102	0.010	0.132	0.015	0.132	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	68.421		53.407		60.030		60.030	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Unpaved Road Dust - East Helena, Montana

Profile Number:41204

Profile Data Quality:B/C

Control Device:Not applicable

Reference(s):43

Data Source:Sampled near a primary Pb smelter and Zn and Cu oxide manufacturing plants. Samples sieved and resuspended.

SCC : 55

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.30	0.42	0.49

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	13.343	1.334	9.347	0.935	12.072	1.924	9.937	0.994
7440-21-3	14	SI	37.418	3.742	29.370	2.937	34.857	5.618	32.679	3.268
7723-14-0	15	P	0.224	0.025	0.149	0.015	0.200	0.033	0.154	0.015
7704-34-9	16	S	0.419	0.060	0.248	0.025	0.365	0.065	0.236	0.024
7782-50-5	17	CL	0.181	0.028	0.113	0.011	0.159	0.029	0.125	0.012
7440-09-7	19	K	1.725	0.172	2.139	0.214	1.857	0.324	2.242	0.224
7440-70-2	20	CA	6.194	0.619	3.994	0.399	5.494	0.870	3.854	0.385
7440-32-6	22	TI	0.741	0.074	0.433	0.043	0.643	0.101	0.473	0.047
7440-62-2	23	V	0.039	NR	0.016	NR	0.032	NE	0.023	NR
7440-47-3	24	CR	0.021	NR	0.019	NR	0.020	NE	0.021	NR
7439-96-5	25	MN	0.049	NR	0.040	NR	0.046	NE	0.037	NR
7439-89-6	26	FE	2.340	0.234	2.158	0.216	2.282	0.376	2.213	0.221
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	0.013	NR	0.014	NR	0.013	NE	0.024	NR
7440-66-6	30	ZN	0.028	NR	0.030	NR	0.029	NE	0.029	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.027	NR	0.033	NR	0.029	NE	0.037	NR
7440-05-3	46	PD	0.052	0.019	<	NR	NE	NE	<	NR

continued (profile=41204)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-22-4	47	AG	<	0.025	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	0.039	<	NR	NE	NE	<	NR
7440-74-6	49	IN	<	0.042	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	0.046	<	NR	NE	NE	<	NR
7440-36-0	51	SB	0.028	0.089	<	0.014	NE	NE	0.011	0.015
7440-39-3	56	BA	0.320	0.250	0.306	0.047	0.316	0.179	0.270	0.051
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.042	0.014	0.027	NR	0.037	NE	0.035	NR
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	63.204		48.436		58.505		52.400	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Unpaved Road Dust - Composite

Profile Number:41220

Profile Data Quality:D

Control Device:Not applicable

Reference(s):44,43

Data Source:Developed from profiles 41201,41203, and 41204.

SCC : 55

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.30	0.59	0.73

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7429-90-5	13	AL	15.242	1.535	10.889	1.099	12.809	1.435	3.312	0.574
7440-21-3	14	SI	33.505	3.370	25.941	2.609	29.278	3.244	10.893	1.887
7723-14-0	15	P	0.311	0.033	0.203	0.021	0.250	0.029	0.051	0.009
7704-34-9	16	S	1.587	0.188	1.447	0.169	1.509	0.174	0.079	0.014
7782-50-5	17	CL	0.374	0.047	0.265	0.031	0.313	0.038	0.042	0.007
7440-09-7	19	K	2.811	0.291	2.930	0.299	2.877	0.313	0.747	0.129
7440-70-2	20	CA	3.581	0.413	3.231	0.341	3.385	0.383	1.285	0.222
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.497	0.053	0.445	0.045	0.468	0.052	0.158	0.027
7440-62-2	23	V	0.035	0.000	0.027	0.000	0.031	0.003	0.008	0.000
7440-47-3	24	CR	0.024	0.000	0.021	0.000	0.022	0.002	0.007	0.000
7439-96-5	25	MN	0.174	0.020	0.152	0.017	0.162	0.019	0.012	0.000
7439-89-6	26	FE	3.692	0.381	3.459	0.359	3.562	0.391	0.738	0.128
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.004	0.000	0.004	0.000	0.004	0.000	0.000	0.000
7440-50-8	29	CU	0.947	0.116	0.811	0.100	0.871	0.103	0.008	0.000
7440-66-6	30	ZN	0.377	0.045	0.360	0.043	0.367	0.043	0.010	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	0.025	0.000	0.027	0.000	0.026	0.002	0.000	0.000

continued (profile=41220)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	0.005	0.000	0.000	0.000	0.002	0.000	0.000	0.000
7440-17-7	37	RB	0.000	0.000	0.013	0.000	0.007	0.001	0.000	0.000
7440-24-6	38	SR	0.027	0.000	0.032	0.000	0.030	0.003	0.012	0.000
7440-65-5	39	Y	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-98-7	42	MO	0.000	0.000	0.010	0.000	0.005	0.001	0.000	0.000
7440-05-3	46	PD	0.017	0.015	0.000	0.000	0.008	0.007	0.000	0.000
7440-22-4	47	AG	0.000	0.020	0.000	0.000	0.000	0.009	0.000	0.000
7440-43-9	48	CD	0.011	0.031	0.000	0.000	0.005	0.014	0.000	0.000
7440-74-6	49	IN	0.015	0.033	0.000	0.000	0.007	0.014	0.000	0.000
7440-31-5	50	SN	0.000	0.037	0.000	0.000	0.000	0.016	0.000	0.000
7440-36-0	51	SB	0.009	0.070	0.000	0.013	0.004	0.031	0.004	0.009
7440-39-3	56	BA	0.198	0.190	0.131	0.041	0.161	0.087	0.090	0.029
7439-91-0	57	LA	0.000	0.000	0.000	0.044	0.000	0.019	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-92-1	82	PB	0.110	0.015	0.076	0.006	0.091	0.011	0.012	0.000
	201	OC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	202	EC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	203	SO4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		SUM =	63.578		50.474		56.254		17.468	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

3.12 PAVED ROADS

Reentrained dust from paved roads consists mostly of sand and soil. Road dust also contains particulates from engine exhaust, wear of bearings and brake linings, and tire abrasion. Particulate emissions are further generated when wind activity is high (>20 kilometers per hour). Emission rates are chiefly affected by volume of traffic, and quantity and size of dust particles.

Profile Name:Paved Road Dust Missoula, Montana

Profile Number:41101

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):28

Data Source:Analysis by XRF and carbon oxidation. Sample resuspended through a dichotomous sampler.

SCC : 113

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

			0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	Species No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	0.960	0.060	0.960	0.060	0.960	0.119	0.960	NE
7439-95-4	12	MG	1.000	0.130	1.000	0.130	1.000	0.154	1.000	NE
7429-90-5	13	AL	8.100	1.000	6.500	1.000	7.409	1.158	7.409	NE
7440-21-3	14	SI	23.800	3.000	28.000	3.000	25.614	3.812	25.614	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	<	NR	<	NR	NE	NE	NE	NE
7782-50-5	17	CL	0.030	0.016	0.032	0.016	0.031	0.013	0.031	NE
7440-09-7	19	K	2.300	0.500	2.300	0.500	2.300	0.479	2.300	NE
7440-70-2	20	CA	1.700	0.100	1.700	0.100	1.700	0.209	1.700	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.260	0.020	0.260	0.020	0.260	0.034	0.260	NE
7440-62-2	23	V	0.004	0.001	0.004	0.001	0.004	0.001	0.004	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.026	0.001	0.026	0.001	0.026	0.003	0.026	NE
7439-89-6	26	FE	3.200	0.400	3.200	0.400	3.200	0.485	3.200	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.110	0.030	0.110	0.030	0.110	0.027	0.110	NE
7440-66-6	30	ZN	0.040	0.010	0.040	0.010	0.040	0.009	0.040	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.002	0.001	0.002	0.001	0.002	0.001	0.002	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.130	0.020	0.130	0.020	0.130	0.022	0.130	NE
	201	OC	10.000	NR	10.000	NR	10.000	NE	10.000	NE
	202	EC	1.400	NR	1.400	NR	1.400	NE	1.400	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	53.062		55.664		54.186		54.186	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Juneau, Alaska

Profile Number:41102

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):19

Data Source:Composite of 3 subsamples (fine fraction). Resuspended and analyzed by XRF.

SCC : 113

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

	Species	Species	0-2.5 um(c)		2.5-10 um(a)		0-10 um(c)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	10.900	NE	10.900	0.580	10.900	NE	10.900	0.580
7440-21-3	14	SI	32.800	NE	32.800	1.680	32.800	NE	32.800	1.680
7723-14-0	15	P	0.190	NE	0.190	0.040	0.190	NE	0.190	0.040
7704-34-9	16	S	0.250	NE	0.250	0.060	0.250	NE	0.250	0.060
7782-50-5	17	CL	0.150	NE	0.150	0.020	0.150	NE	0.150	0.020
7440-09-7	19	K	1.460	NE	1.460	0.080	1.460	NE	1.460	0.080
7440-70-2	20	CA	3.290	NE	3.290	0.170	3.290	NE	3.290	0.170
7440-20-2	21	SC	<	NE	<	0.000	<	NE	<	0.000
7440-32-6	22	TI	0.810	NE	0.810	0.040	0.810	NE	0.810	0.040
7440-62-2	23	V	0.050	NE	0.050	0.000	0.050	NE	0.050	0.000
7440-47-3	24	CR	0.030	NE	0.030	0.000	0.030	NE	0.030	0.000
7439-96-5	25	MN	0.130	NE	0.130	0.000	0.130	NE	0.130	0.000
7439-89-6	26	FE	7.190	NE	7.190	0.370	7.190	NE	7.190	0.370
7440-48-4	27	CO	<	NE	<	0.000	<	NE	<	0.000
7440-02-0	28	NI	0.010	NE	0.010	0.000	0.010	NE	0.010	0.000
7440-50-8	29	CU	0.010	NE	0.010	0.000	0.010	NE	0.010	0.000
7440-66-6	30	ZN	0.700	NE	0.700	0.000	0.700	NE	0.700	0.000
7440-55-3	31	GA	<	NE	<	0.000	<	NE	<	0.000
7440-56-4	32	GE	<	NE	<	0.000	<	NE	<	0.000
7440-38-2	33	AS	<	NE	<	0.000	<	NE	<	0.000

continued (profile=41102)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	0.000	<	NE	<	0.000
7726-95-6	35	BR	0.020	NE	0.020	0.000	0.020	NE	0.020	0.000
7440-17-7	37	RB	<	NE	<	0.000	<	NE	<	0.000
7440-24-6	38	SR	0.050	NE	0.050	0.000	0.050	NE	0.050	0.000
7440-67-7	40	ZR	0.010	NE	0.010	0.020	0.010	NE	0.010	0.020
7440-22-4	47	AG	<	NE	<	0.000	<	NE	<	0.000
7440-43-9	48	CD	<	NE	<	0.000	<	NE	<	0.000
7440-31-5	50	SN	0.080	NE	0.080	0.030	0.080	NE	0.080	0.030
7440-36-0	51	SB	0.030	NE	0.030	0.040	0.030	NE	0.030	0.040
7440-46-2	55	CS	<	NE	<	0.000	<	NE	<	0.000
7440-39-3	56	BA	0.280	NE	0.280	0.160	0.280	NE	0.280	0.160
7440-45-1	58	CE	<	NE	<	0.000	<	NE	<	0.000
7439-97-6	80	HG	<	NE	<	0.000	<	NE	<	0.000
7439-92-1	82	PB	0.530	NE	0.530	0.030	0.530	NE	0.530	0.030
	201	OC	NA	NE	NA	NR	NA	NE	NA	NR
	202	EC	NA	NE	NA	NR	NA	NE	NA	NR
	203	SO4	0.750	NE	0.750	0.180	0.750	NE	0.750	0.180
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
		SUM =	59.720		59.720		59.720		59.720	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Lewiston, Idaho

Profile Number:41103

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):42

Data Source:Resuspended and analyzed by XRF.

SCC : 113

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	1.300	0.200	1.600	0.100	1.430	0.209	1.430	NE
7439-95-4	12	MG	2.200	0.500	1.600	0.200	1.941	0.376	1.941	NE
7429-90-5	13	AL	11.600	0.700	6.900	0.300	9.570	1.168	9.570	NE
7440-21-3	14	SI	36.000	2.000	24.000	1.000	30.818	3.701	30.818	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.600	0.100	0.360	0.020	0.496	0.081	0.496	NE
7782-50-5	17	CL	0.310	0.070	0.140	NR	0.237	NE	0.237	NE
7440-09-7	19	K	1.180	0.090	1.200	0.060	1.189	0.149	1.189	NE
7440-70-2	20	CA	2.400	0.100	2.800	0.100	2.573	0.307	2.573	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.630	0.040	0.860	0.040	0.729	0.091	0.729	NE
7440-62-2	23	V	0.020	0.010	0.030	NR	0.024	NE	0.024	NE
7440-47-3	24	CR	0.030	NR	0.030	NR	0.030	NE	0.030	NE
7439-96-5	25	MN	0.120	0.020	0.130	NR	0.124	NE	0.124	NE
7439-89-6	26	FE	5.700	0.300	6.600	0.300	6.089	0.741	6.089	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.040	NR	0.010	NR	0.027	NE	0.027	NE
7440-50-8	29	CU	0.040	0.020	0.010	NR	0.027	NE	0.027	NE
7440-66-6	30	ZN	0.160	0.020	0.080	0.040	0.125	0.029	0.125	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41103)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.020	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.330	0.050	0.140	NR	0.248	NE	0.248	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	62.680		46.490		55.688		55.688	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Butte, Montana

Profile Number:41104

Profile Data Quality:D/E

Control Device:Not applicable

Reference(s):44

Data Source:Road near copper mine. Bulk sample sieved and resuspended.

SCC : 113

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	13.493	1.349	8.195	0.819	11.205	1.553	11.205	NE
7440-21-3	14	SI	34.850	3.493	23.641	2.364	30.010	4.146	30.010	NE
7723-14-0	15	P	0.406	0.041	0.234	0.023	0.332	0.046	0.332	NE
7704-34-9	16	S	1.029	0.103	0.750	0.075	0.909	0.125	0.909	NE
7782-50-5	17	CL	0.173	0.022	0.127	0.013	0.153	0.023	0.153	NE
7440-09-7	19	K	2.374	0.237	2.330	0.233	2.355	0.327	2.355	NE
7440-70-2	20	CA	3.937	0.394	4.091	0.409	4.003	0.559	4.003	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.336	0.037	0.409	0.041	0.368	0.053	0.368	NE
7440-62-2	23	V	0.031	NR	0.028	NR	0.030	NE	0.030	NE
7440-47-3	24	CR	0.032	NR	0.032	NR	0.032	NE	0.032	NE
7439-96-5	25	MN	0.134	0.013	0.116	0.012	0.126	0.017	0.126	NE
7439-89-6	26	FE	4.354	0.435	4.052	0.405	4.224	0.585	4.224	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.013	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.327	0.033	0.302	0.030	0.316	0.044	0.316	NE
7440-66-6	30	ZN	0.254	0.025	2.100	0.021	1.051	0.171	1.051	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	0.023	NR	0.016	NR	0.020	NE	0.020	NE

continued (profile=41104)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	0.015	NR	NE	NE	NE	NE
7440-24-6	38	SR	0.027	NR	0.035	NR	0.030	NE	0.030	NE
7439-98-7	42	MO	<	NR	0.020	NR	NE	NE	NE	NE
7440-05-3	46	PD	0.023	0.014	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	0.018	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	0.026	<	NR	NE	NE	NE	NE
7440-74-6	49	IN	<	0.029	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	0.032	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	0.091	0.057	0.019	NR	0.060	NE	0.060	NE
7440-39-3	56	BA	<	0.162	<	0.024	NE	NE	NE	NE
7439-91-0	57	LA	<	NR	<	0.035	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.178	0.018	0.125	0.012	0.155	0.021	0.155	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	62.085		46.637		55.414		55.414	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Paved Road Dust - East Helena, Montana

Profile Number:41105

Profile Data Quality:C/D

Control Device:Not applicable

Reference(s):43

Data Source:Road dust near a primary Pb smelter and Zn and Cu oxide manufacturing plants. Samples sieved and resuspended.

SCC : 113

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	8.821	0.882	7.415	0.741	8.214	1.134	5.586	0.559
7440-21-3	14	SI	26.334	2.633	25.299	2.530	25.887	3.594	19.943	1.994
7723-14-0	15	P	0.287	0.040	0.217	0.022	0.257	0.039	0.131	0.013
7704-34-9	16	S	2.076	0.251	1.310	0.131	1.745	0.255	0.856	0.086
7782-50-5	17	CL	0.373	0.061	0.134	0.017	0.270	0.048	0.063	0.012
7440-09-7	19	K	1.560	0.156	1.724	0.172	1.631	0.229	1.216	0.122
7440-70-2	20	CA	5.859	0.586	6.973	0.697	6.340	0.896	5.583	0.558
7440-32-6	22	TI	0.349	0.035	0.397	0.040	0.370	0.052	0.309	0.031
7440-62-2	23	V	0.023	NR	0.024	NR	0.023	NE	0.018	NR
7440-47-3	24	CR	<	NR	0.024	NR	NE	NE	0.018	NR
7439-96-5	25	MN	0.140	0.015	0.137	0.014	0.139	0.020	0.106	0.011
7439-89-6	26	FE	3.885	0.388	4.341	0.434	4.082	0.573	3.109	0.311
7440-02-0	28	NI	<	NR	0.014	NR	NE	NE	0.011	NR
7440-50-8	29	CU	0.382	0.038	0.507	0.051	0.436	0.063	0.503	0.050
7440-66-6	30	ZN	1.289	0.129	0.841	0.084	1.096	0.151	0.590	0.059
7440-38-2	33	AS	0.342	0.052	0.212	0.021	0.286	0.045	0.153	0.015
7782-49-2	34	SE	0.011	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.108	0.013	0.029	NR	0.074	NE	0.023	NR
7440-24-6	38	SR	0.022	NR	0.035	NR	0.028	NE	0.026	NR
7440-05-3	46	PD	<	0.027	<	NR	NE	NE	<	NR

continued (profile=41105)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-22-4	47	AG	0.024	0.043	0.011	NR	0.018	NE	<	NR
7440-43-9	48	CD	0.226	0.068	0.090	0.015	0.167	0.044	0.040	NR
7440-74-6	49	IN	<	0.069	<	0.014	NE	NE	0.023	NR
7440-31-5	50	SN	0.048	0.079	0.034	0.016	0.042	0.046	0.028	0.011
7440-36-0	51	SB	0.123	0.147	0.082	0.031	0.105	0.086	0.055	0.022
7440-39-3	56	BA	0.099	0.376	0.076	0.074	0.089	0.218	<	0.052
7439-97-6	80	HG	0.015	0.012	<	NR	NE	NE	<	NR
7439-92-1	82	PB	2.473	0.247	1.909	0.191	2.229	0.307	1.507	0.151
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	54.869		51.835		53.559		39.897	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Medford OR

Profile Number:41106

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):45

Data Source:Resuspended and sampled with a dichotomous sampler.

SCC : 113

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	2.000	0.300	2.000	0.300	2.000	0.331	2.000	NE
7439-95-4	12	MG	2.000	0.300	1.900	0.100	1.957	0.285	1.957	NE
7429-90-5	13	AL	8.100	0.300	8.200	0.500	8.143	0.984	8.143	NE
7440-21-3	14	SI	23.800	1.300	24.800	1.300	24.232	2.953	24.232	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	0.400	0.100	0.320	0.200	0.365	0.134	0.365	NE
7782-50-5	17	CL	0.040	NR	NA	NR	NE	NE	NE	NE
7440-09-7	19	K	0.920	0.080	0.830	0.080	0.881	0.119	0.881	NE
7440-70-2	20	CA	2.500	1.100	2.400	1.200	2.457	0.966	2.457	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.650	0.110	0.540	0.060	0.603	0.098	0.603	NE
7440-62-2	23	V	0.023	NR	0.031	NR	0.026	NE	0.026	NE
7440-47-3	24	CR	0.026	NR	0.026	NR	0.026	NE	0.026	NE
7439-96-5	25	MN	0.110	NR	0.120	0.020	0.114	NE	0.114	NE
7439-89-6	26	FE	4.900	0.400	4.700	0.400	4.814	0.633	4.814	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.010	NR	0.100	NR	0.049	NE	0.049	NE
7440-50-8	29	CU	0.040	0.030	0.080	0.090	0.057	0.054	0.057	NE
7440-66-6	30	ZN	0.050	NR	0.040	0.020	0.046	NE	0.046	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41106)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.130	0.040	0.090	0.040	0.113	0.035	0.113	NE
	201	OC	10.000	2.000	8.700	1.900	9.439	1.895	9.439	NE
	202	EC	1.400	0.500	1.600	0.800	1.486	0.563	1.486	NE
	203	SO4	0.240	0.170	0.230	0.120	0.236	0.121	0.236	NE
	204	NO3	0.100	0.030	NA	NR	NE	NE	NE	NE
		SUM =	57.439		56.707		57.124		57.124	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Portland, OR

Profile Number:41107

Profile Data Quality:A/C

Control Device:Not applicable

Reference(s):46

Data Source:Resuspended and sampled with a 2-stage virtual impactor with a Method 5 heated probe. No dilution air. Analysis by XRF,INNA,IC, and carbon oxidation.

SCC : 113

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	0.010	0.008	0.007	NE	NE	NE	NE
7440-23-5	11	NA	1.250	0.340	1.750	0.091	1.466	0.264	1.466	NE
7439-95-4	12	MG	1.300	0.270	1.540	0.140	1.404	0.237	1.404	NE
7429-90-5	13	AL	8.840	2.710	6.600	0.700	7.873	1.821	7.873	NE
7440-21-3	14	SI	22.300	1.100	28.400	0.790	24.934	3.002	24.934	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.370	0.140	<	0.020	NE	NE	NE	NE
7782-50-5	17	CL	<	0.010	<	0.020	NE	NE	NE	NE
7440-09-7	19	K	1.030	0.060	1.030	0.058	1.030	0.126	1.030	NE
7440-70-2	20	CA	2.440	0.400	3.000	0.220	2.682	0.405	2.682	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.640	0.120	1.010	0.180	0.800	0.156	0.800	NE
7440-62-2	23	V	0.023	0.005	0.027	0.005	0.025	0.005	0.025	NE
7440-47-3	24	CR	0.045	0.017	0.045	0.017	0.045	0.015	0.045	NE
7439-96-5	25	MN	0.123	0.017	0.100	0.011	0.113	0.017	0.113	NE
7439-89-6	26	FE	6.000	0.600	5.730	0.290	5.883	0.767	5.883	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.009	0.003	0.004	0.003	0.007	0.003	0.007	NE
7440-50-8	29	CU	0.030	0.012	0.030	0.012	0.030	0.010	0.030	NE
7440-66-6	30	ZN	0.110	0.037	0.110	0.037	0.110	0.032	0.110	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41107)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.020	0.006	0.008	0.009	0.015	0.006	0.015	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.370	0.150	0.370	0.150	0.370	0.128	0.370	NE
	201	OC	11.800	4.300	3.340	0.980	8.147	2.693	8.147	NE
	202	EC	1.850	0.910	1.550	0.780	1.720	0.708	1.720	NE
	203	SO4	0.420	0.310	0.074	0.045	0.271	0.181	0.271	NE
	204	NO3	NA	NR	0.020	0.010	NE	NE	NE	NE
		SUM =	58.970		54.746		57.147		57.147	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Alabama

Profile Number:41109

Profile Data Quality:D/E

Control Device:Not applicable

Reference(s):48

Data Source:Resuspended and sampled with a dichotomous sampler.

SCC : 113

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	9.280	2.970	6.320	1.200	8.002	2.031	8.002	NE
7440-21-3	14	SI	19.700	6.200	23.900	4.800	21.514	5.103	21.514	NE
7723-14-0	15	P	0.123	0.104	0.239	0.048	0.173	0.069	0.173	NE
7704-34-9	16	S	0.800	0.384	0.612	0.120	0.719	0.242	0.719	NE
7782-50-5	17	CL	0.247	0.163	0.230	0.046	0.240	0.100	0.240	NE
7440-09-7	19	K	0.494	0.174	0.595	0.120	0.538	0.135	0.538	NE
7440-70-2	20	CA	3.150	1.090	7.990	1.600	5.240	1.299	5.240	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.444	0.147	0.466	0.094	0.454	0.112	0.454	NE
7440-62-2	23	V	0.030	0.022	0.014	0.004	0.023	0.013	0.023	NE
7440-47-3	24	CR	0.270	0.025	0.023	0.004	0.163	0.026	0.163	NE
7439-96-5	25	MN	0.080	0.035	0.070	0.014	0.076	0.023	0.076	NE
7439-89-6	26	FE	3.140	1.010	2.750	0.560	2.972	0.737	2.972	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	0.023	0.013	0.003	NE	NE	NE	NE
7440-50-8	29	CU	<	0.026	0.016	0.004	NE	NE	NE	NE
7440-66-6	30	ZN	0.090	0.037	0.119	0.024	0.103	0.028	0.103	NE
7440-55-3	31	GA	0.005	0.017	<	0.002	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	0.055	<	0.008	NE	NE	NE	NE

continued (profile=41109)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7782-49-2	34	SE	0.010	0.018	0.001	0.002	0.006	0.010	0.006	NE
7726-95-6	35	BR	0.036	0.027	0.013	0.003	0.026	0.016	0.026	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.187	0.103	0.163	0.032	0.177	0.064	0.177	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	38.086		43.534		40.442		40.442	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Spokane, WA

Profile Number:41110

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):27

Data Source:Resuspended and analyzed by XRF.

SCC : 113

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	1.870	0.150	1.870	0.150	1.870	0.244	1.870	NE
7429-90-5	13	AL	11.010	0.780	11.010	0.780	11.010	1.399	11.010	NE
7440-21-3	14	SI	27.970	1.930	27.970	1.930	27.970	3.537	27.970	NE
7723-14-0	15	P	0.300	0.030	0.300	0.030	0.300	0.042	0.300	NE
7704-34-9	16	S	0.370	0.100	0.370	0.100	0.370	0.091	0.370	NE
7782-50-5	17	CL	0.110	0.050	0.110	0.050	0.110	0.042	0.110	NE
7440-09-7	19	K	1.540	0.130	1.540	0.130	1.540	0.204	1.540	NE
7440-70-2	20	CA	0.790	0.070	0.790	0.070	0.790	0.106	0.790	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.440	0.040	0.440	0.040	0.440	0.059	0.440	NE
7440-62-2	23	V	0.020	NR	0.020	NR	0.020	NE	0.020	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.240	0.020	0.240	0.020	0.240	0.032	0.240	NE
7439-89-6	26	FE	5.280	0.370	5.280	0.370	5.280	0.670	5.280	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.010	NR	0.010	NR	0.010	NE	0.010	NE
7440-50-8	29	CU	0.020	NR	0.020	NR	0.020	NE	0.020	NE
7440-66-6	30	ZN	0.030	NR	0.030	NR	0.030	NE	0.030	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41110)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	0.010	NR	0.010	NR	0.010	NE	0.010	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	0.050	0.060	0.050	0.060	0.050	0.049	0.050	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.110	0.020	0.110	0.020	0.110	0.020	0.110	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	50.170		50.170		50.170		50.170	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Paved Road Dust - Composite

Profile Number:41130

Profile Data Quality:E

Control Device:Not applicable

Reference(s):19,27,28,42,43,44,45,46,48

Data Source:Developed from profiles 41101,41102,41103,41104,41105,41106,41107,41109,41110.

SCC : 113

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.25	0.37	0.44

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.003	0.001	0.002	0.000	0.002	0.000	0.000
7440-23-5	11	NA	0.551	0.158	0.631	0.106	0.586	0.127	0.000	0.000
7439-95-4	12	MG	0.837	0.213	0.791	0.104	0.817	0.163	0.000	0.000
7429-90-5	13	AL	7.924	1.447	7.204	0.737	7.613	1.262	1.649	0.255
7440-21-3	14	SI	21.475	2.778	23.881	2.321	22.514	3.300	5.274	0.825
7723-14-0	15	P	0.112	0.039	0.118	0.024	0.114	0.029	0.032	0.013
7704-34-9	16	S	0.565	0.165	0.397	0.096	0.492	0.122	0.111	0.033
7782-50-5	17	CL	0.128	0.062	0.092	0.025	0.113	0.040	0.021	0.007
7440-09-7	19	K	1.140	0.199	1.301	0.196	1.209	0.211	0.268	0.046
7440-70-2	20	CA	2.278	0.555	3.303	0.690	2.721	0.597	0.887	0.184
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.375	0.074	0.519	0.073	0.437	0.078	0.112	0.016
7440-62-2	23	V	0.017	0.008	0.023	0.002	0.020	0.005	0.007	0.000
7440-47-3	24	CR	0.040	0.010	0.021	0.006	0.032	0.007	0.005	0.000
7439-96-5	25	MN	0.097	0.016	0.107	0.012	0.101	0.016	0.024	0.003
7439-89-6	26	FE	3.646	0.476	4.384	0.379	3.965	0.574	1.030	0.153
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.008	0.007	0.016	0.001	0.012	0.004	0.002	0.000
7440-50-8	29	CU	0.095	0.024	0.109	0.036	0.101	0.027	0.051	0.016
7440-66-6	30	ZN	0.202	0.045	0.406	0.034	0.290	0.049	0.129	0.019
7440-55-3	31	GA	0.001	0.005	0.000	0.001	0.000	0.003	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	0.037	0.024	0.023	0.007	0.031	0.015	0.015	0.005

continued (profile=41130)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.002	0.006	0.000	0.001	0.001	0.003	0.000	0.000
7726-95-6	35	BR	0.019	0.010	0.007	0.003	0.014	0.006	0.004	0.000
7440-17-7	37	RB	0.000	0.000	0.002	0.000	0.001	0.000	0.000	0.000
7440-24-6	38	SR	0.006	0.000	0.013	0.000	0.009	0.001	0.008	0.000
7440-67-7	40	ZR	0.000	0.000	0.001	0.006	0.000	0.004	0.001	0.006
7439-98-7	42	MO	0.000	0.000	0.002	0.000	0.001	0.000	0.000	0.000
7440-05-3	46	PD	0.002	0.010	0.000	0.000	0.001	0.005	0.000	0.000
7440-22-4	47	AG	0.002	0.015	0.001	0.000	0.002	0.008	0.000	0.000
7440-43-9	48	CD	0.028	0.030	0.014	0.020	0.022	0.020	0.004	0.000
7440-74-6	49	IN	0.000	0.024	0.000	0.004	0.000	0.014	0.002	0.000
7440-31-5	50	SN	0.005	0.027	0.011	0.011	0.008	0.017	0.011	0.010
7440-36-0	51	SB	0.021	0.050	0.013	0.016	0.018	0.030	0.008	0.014
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.010	0.129	0.036	0.056	0.021	0.080	0.028	0.053
7439-91-0	57	LA	0.000	0.000	0.000	0.011	0.000	0.006	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.002	0.004	0.000	0.000	0.001	0.002	0.000	0.000
7439-92-1	82	PB	0.391	0.100	0.357	0.080	0.376	0.084	0.204	0.049
	201	OC	3.180	1.500	2.204	0.676	2.759	0.985	0.000	0.000
	202	EC	0.465	0.328	0.455	0.353	0.461	0.279	0.000	0.000
	203	SO4	0.066	0.112	0.105	0.070	0.083	0.076	0.075	0.057
	204	NO3	0.010	0.009	0.002	0.003	0.007	0.006	0.000	0.000
		SUM =	43.737		46.550		44.953		9.962	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Road Sand and Salt Mixture

Profile Number:41401

Profile Data Quality:C/D

Control Device:Not applicable

Reference(s):43

Data Source:Sample sieved and resuspended.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.37	0.44

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	13.453	1.345	7.848	0.785	11.033	1.533	8.638	0.864
7440-21-3	14	SI	33.403	3.340	20.909	2.091	28.008	3.878	23.964	2.396
7723-14-0	15	P	0.393	0.039	0.260	0.026	0.336	0.046	0.260	0.026
7704-34-9	16	S	0.977	0.105	0.706	0.071	0.860	0.121	0.754	0.075
7782-50-5	17	CL	8.375	0.837	8.832	0.883	8.572	1.198	10.095	1.009
7440-09-7	19	K	1.425	0.142	1.194	0.119	1.325	0.183	1.191	0.119
7440-70-2	20	CA	3.735	0.373	2.387	0.239	3.153	0.436	2.388	0.239
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.385	0.038	0.353	0.035	0.371	0.051	0.388	0.039
7440-62-2	23	V	0.030	NR	0.022	NR	0.027	NE	0.023	NR
7440-47-3	24	CR	0.037	NR	0.025	NR	0.032	NE	0.025	NR
7439-96-5	25	MN	0.122	0.012	0.087	NR	0.107	NE	0.089	NR
7439-89-6	26	FE	4.970	0.497	3.775	0.377	4.454	0.614	4.059	0.406
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.020	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	0.292	0.029	0.169	0.017	0.239	0.033	0.151	0.015
7440-66-6	30	ZN	0.253	0.025	0.123	0.012	0.197	0.028	0.052	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=41401)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.016	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.027	NR	0.021	NR	0.024	NE	0.026	NR
7440-05-3	46	PD	0.036	0.023	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.057	0.031	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	0.044	<	NR	NE	NE	<	NR
7440-74-6	49	IN	<	0.052	<	NR	NE	NE	<	NR
7440-31-5	50	SN	0.032	0.058	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	0.107	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	0.285	<	NR	NE	NE	<	0.027
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.253	0.027	0.107	0.011	0.190	0.028	0.049	NR
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	68.291		46.818		59.018		52.152	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.13 NATURAL SOURCES

Natural sources of particulate emissions include sources such as marine aerosols, volcanic ash, and soil dust. Marine aerosol particulates would be most significant in coastal areas. Volcanic ash and soil dust would be more significant in rural areas than urban areas.

Profile Name:Soil Dust - Des Moines, IA

Profile Number:41301

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):26

Data Source:XRF, C, and CO3 analysis of resuspended soils. Each sample was a composite of 3 subsamples.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	3.717	NE	3.717	NR	3.717	NE	3.717	NR
7440-21-3	14	SI	15.631	NE	15.631	NR	15.631	NE	15.631	NR
7723-14-0	15	P	0.108	NE	0.108	NR	0.108	NE	0.108	NR
7704-34-9	16	S	0.746	NE	0.746	NR	0.746	NE	0.746	NR
7782-50-5	17	CL	0.192	NE	0.192	NR	0.192	NE	0.192	NR
7440-09-7	19	K	0.596	NE	0.596	NR	0.596	NE	0.596	NR
7440-70-2	20	CA	10.007	NE	10.007	NR	10.007	NE	10.007	NR
7440-20-2	21	SC	<	NE	<	NR	<	NE	<	NR
7440-32-6	22	TI	0.197	NE	0.197	NR	0.197	NE	0.197	NR
7440-62-2	23	V	0.017	NE	0.017	NR	0.017	NE	0.017	NR
7440-47-3	24	CR	0.017	NE	0.017	NR	0.017	NE	0.017	NR
7439-96-5	25	MN	0.092	NE	0.092	NR	0.092	NE	0.092	NR
7439-89-6	26	FE	3.950	NE	3.950	NR	3.950	NE	3.950	NR
7440-48-4	27	CO	<	NE	<	NR	<	NE	<	NR
7440-02-0	28	NI	0.006	NE	0.006	NR	0.006	NE	0.006	NR
7440-50-8	29	CU	0.027	NE	0.027	NR	0.027	NE	0.027	NR
7440-66-6	30	ZN	0.044	NE	0.044	NR	0.044	NE	0.044	NR
7440-55-3	31	GA	<	NE	<	NR	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NR	<	NE	<	NR
7440-38-2	33	AS	0.009	NE	0.009	NR	0.009	NE	0.009	NR

continued (profile=41301)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NR	<	NE	<	NR
7726-95-6	35	BR	0.006	NE	0.006	NR	0.006	NE	0.006	NR
7440-17-7	37	RB	<	NE	<	NR	<	NE	<	NR
7440-24-6	38	SR	0.028	NE	0.028	NR	0.028	NE	0.028	NR
7440-67-7	40	ZR	<	NE	<	NR	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NR	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NR	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NR	<	NE	<	NR
7440-36-0	51	SB	0.001	NE	0.001	NR	0.001	NE	0.001	NR
7440-46-2	55	CS	<	NE	<	NR	<	NE	<	NR
7440-39-3	56	BA	0.033	NE	0.033	NR	0.033	NE	0.033	NR
7440-45-1	58	CE	<	NE	<	NR	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NR	<	NE	<	NR
7439-92-1	82	PB	0.066	NE	0.066	NR	0.066	NE	0.066	NR
	200	TC	1.962	NE	1.962	NR	1.962	NE	1.962	NR
	203	SO4	NA	NE	NA	NR	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
	206	CO3	24.651	NE	24.651	0.000	24.651	NE	24.651	0.000
		SUM =	62.103		62.103		62.103		62.103	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Seattle, WA

Profile Number:41302

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):27

Data Source:Resuspended through a dichotomous impactor and analyzed by XRF,INNA, and carbon oxidation.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NE	NA	NE	NA	NE
7440-42-8	5	B	NA	NR	NA	NE	NA	NE	NA	NE
7782-41-4	9	F	NA	NR	NA	NE	NA	NE	NA	NE
7440-23-5	11	NA	NA	NR	NA	NE	NA	NE	NA	NE
7439-95-4	12	MG	1.280	0.108	1.280	NE	1.280	NE	1.280	NE
7429-90-5	13	AL	11.120	0.743	11.120	NE	11.120	NE	11.120	NE
7440-21-3	14	SI	27.336	1.780	27.336	NE	27.336	NE	27.336	NE
7723-14-0	15	P	0.336	0.031	0.336	NE	0.336	NE	0.336	NE
7704-34-9	16	S	0.380	0.088	0.380	NE	0.380	NE	0.380	NE
7782-50-5	17	CL	0.024	0.035	0.024	NE	0.024	NE	0.024	NE
7440-09-7	19	K	0.719	0.066	0.719	NE	0.719	NE	0.719	NE
7440-70-2	20	CA	0.864	0.070	0.864	NE	0.864	NE	0.864	NE
7440-20-2	21	SC	<	NR	<	NE	<	NE	<	NE
7440-32-6	22	TI	0.440	0.038	0.440	NE	0.440	NE	0.440	NE
7440-62-2	23	V	0.039	0.009	0.039	NE	0.039	NE	0.039	NE
7440-47-3	24	CR	<	NR	<	NE	<	NE	<	NE
7439-96-5	25	MN	0.144	0.014	0.144	NE	0.144	NE	0.144	NE
7439-89-6	26	FE	4.989	0.340	4.989	NE	4.989	NE	4.989	NE
7440-48-4	27	CO	<	NR	<	NE	<	NE	<	NE
7440-02-0	28	NI	<	NR	<	NE	<	NE	<	NE
7440-50-8	29	CU	0.008	0.006	0.008	NE	0.008	NE	0.008	NE
7440-66-6	30	ZN	0.042	0.008	0.042	NE	0.042	NE	0.042	NE
7440-55-3	31	GA	<	NR	<	NE	<	NE	<	NE
7440-56-4	32	GE	<	NR	<	NE	<	NE	<	NE
7440-38-2	33	AS	<	NR	<	NE	<	NE	<	NE

continued (profile=41302)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(c) % wt.	2.5-10 um(c) Unc.	0-10 um(c) % wt	0-10 um(c) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7782-49-2	34	SE	<	NR	<	NE	<	NE	<	NE
7726-95-6	35	BR	<	NR	<	NE	<	NE	<	NE
7440-17-7	37	RB	<	NR	<	NE	<	NE	<	NE
7440-24-6	38	SR	0.021	0.008	0.021	NE	0.021	NE	0.021	NE
7440-67-7	40	ZR	<	NR	<	NE	<	NE	<	NE
7440-22-4	47	AG	<	NR	<	NE	<	NE	<	NE
7440-43-9	48	CD	0.039	0.055	0.039	NE	0.039	NE	0.039	NE
7440-31-5	50	SN	<	NR	<	NE	<	NE	<	NE
7440-36-0	51	SB	<	NR	<	NE	<	NE	<	NE
7440-46-2	55	CS	<	NR	<	NE	<	NE	<	NE
7440-39-3	56	BA	<	NR	<	NE	<	NE	<	NE
7440-45-1	58	CE	<	NR	<	NE	<	NE	<	NE
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NE
7439-92-1	82	PB	0.107	0.022	0.107	NE	0.107	NE	0.107	NE
	201	OC	NA	NR	NA	NE	NA	NE	NA	NE
	202	EC	NA	NR	NA	NE	NA	NE	NA	NE
	203	SO4	NA	NR	NA	NE	NA	NE	NA	NE
	204	NO3	NA	NR	NA	NE	NA	NE	NA	NE
		SUM =	47.888		47.888		47.838		47.888	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Visalia, CA

Profile Number:41303

Profile Data Quality:D/E

Control Device:Not applicable

Reference(s):31

Data Source:7 soil samples

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NE	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NE	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NE	NR	NE	NR	NR
7440-23-5	11	NA	1.200	NE	1.200	NE	1.200	NE	1.200	NR
7439-95-4	12	MG	0.400	NE	0.400	NE	0.400	NE	0.400	NR
7429-90-5	13	AL	5.000	NE	5.000	NE	5.000	NE	5.000	NR
7440-21-3	14	SI	19.700	NE	19.700	NE	19.700	NE	19.700	NR
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	0.300	NE	0.300	NE	0.300	NE	0.300	NR
7782-50-5	17	CL	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7440-09-7	19	K	1.500	NE	1.500	NE	1.500	NE	1.500	NR
7440-70-2	20	CA	2.500	NE	2.500	NE	2.500	NE	2.500	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7440-62-2	23	V	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-47-3	24	CR	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7439-96-5	25	MN	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7439-89-6	26	FE	3.000	NE	3.000	NE	3.000	NE	3.000	NR
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-50-8	29	CU	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NE	<	NE	<	NR

continued (profile=41303)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NE	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NE	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	0.300	NE	0.300	NE	0.300	NE	0.300	NR
7440-45-1	58	CE	0.300	NE	0.300	NE	0.300	NE	0.300	NR
7439-97-6	80	HG	0.300	NE	0.300	NE	0.300	NE	0.300	NR
7439-92-1	82	PB	0.200	NE	0.200	NE	0.200	NE	0.200	NR
	201	OC	NR	NE	NR	NE	NR	NE	NR	NR
	202	EC	NR	NE	NR	NE	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NE	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NE	NR	NE	NR	NR
		SUM =	35.450		35.450		35.450		35.450	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - South Bend, Indiana

Profile Number:41304

Profile Data Quality:B/C

Control Device:Not applicable

Reference(s):32

Data Source:Sample is a mix of 3 subsamples. Total particulate composition assumed similar to coarse mode.

SCC : 58

Mass Fraction Data :

	(0-2.5)	(0-6)	(0-10)
Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	9.040	2.299	7.581	0.433	7.946	0.718	7.581	0.433
7440-21-3	14	SI	29.675	7.270	30.660	1.684	30.414	2.399	30.660	1.684
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	7.323	2.135	0.302	0.064	2.057	0.594	0.302	0.064
7782-50-5	17	CL	0.743	0.390	0.171	0.031	0.314	0.101	0.171	0.031
7440-09-7	19	K	1.563	4.680	1.500	0.099	1.516	1.173	1.500	0.099
7440-70-2	20	CA	1.230	0.365	2.030	0.124	1.830	0.128	2.030	0.124
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.370	0.129	0.416	0.030	0.404	0.039	0.416	0.030
7440-62-2	23	V	<	NR	0.016	0.006	NE	NE	0.016	0.006
7440-47-3	24	CR	0.061	0.061	0.032	0.006	0.039	0.016	0.032	0.006
7439-96-5	25	MN	0.136	0.074	0.120	0.010	0.124	0.020	0.120	0.010
7439-89-6	26	FE	4.138	1.069	3.535	0.206	3.686	0.333	3.535	0.206
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.028	0.051	0.006	0.003	0.011	0.013	0.006	0.003
7440-50-8	29	CU	<	NR	<	NR	NE	NE	<	NR
7440-66-6	30	ZN	0.280	0.101	0.071	0.009	0.123	0.027	0.071	0.009
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

continued (profile=41304)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.280	0.106	0.003	0.004	0.072	0.028	0.003	0.004
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.143	0.436	0.083	0.016	0.098	0.109	0.083	0.016
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	55.010		46.526		48.646		46.526	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Houston, TX

Profile Number:41305

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):40

Data Source:Reintrained soil dust analyzed by XRF.

SCC : 58

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	5.600	NE	5.600	2.800	5.600	NE	5.600	2.800
7440-21-3	14	SI	17.200	NE	17.200	5.300	17.200	NE	17.200	5.300
7723-14-0	15	P	<	NE	<	NR	<	NE	<	NR
7704-34-9	16	S	<	NE	<	NR	<	NE	<	NR
7782-50-5	17	CL	<	NE	<	NR	<	NE	<	NR
7440-09-7	19	K	0.900	NE	0.900	0.135	0.900	NE	0.900	0.135
7440-70-2	20	CA	7.000	NE	7.000	1.050	7.000	NE	7.000	1.050
7440-20-2	21	SC	<	NE	<	NR	<	NE	<	NR
7440-32-6	22	TI	0.400	NE	0.400	0.060	0.400	NE	0.400	0.060
7440-62-2	23	V	<	NE	<	NR	<	NE	<	NR
7440-47-3	24	CR	<	NE	<	NR	<	NE	<	NR
7439-96-5	25	MN	0.060	NE	0.060	0.009	0.060	NE	0.060	0.009
7439-89-6	26	FE	2.800	NE	2.800	0.420	2.800	NE	2.800	0.420
7440-48-4	27	CO	<	NE	<	NR	<	NE	<	NR
7440-02-0	28	NI	<	NE	<	NR	<	NE	<	NR
7440-50-8	29	CU	0.500	NE	0.500	0.075	0.500	NE	0.500	0.075
7440-66-6	30	ZN	0.300	NE	0.300	0.045	0.300	NE	0.300	0.045
7440-55-3	31	GA	<	NE	<	NR	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NR	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NR	<	NE	<	NR

continued (profile=41305)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NR	<	NE	<	NR
7726-95-6	35	BR	<	NE	<	NR	<	NE	<	NR
7440-17-7	37	RB	<	NE	<	NR	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NR	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NR	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NR	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NR	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NR	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NR	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NR	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NR	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NR	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NR	<	NE	<	NR
7439-92-1	82	PB	0.040	NE	0.040	0.006	0.040	NE	0.040	0.006
	201	OC	NA	NE	NA	NR	NA	NE	NA	NR
	202	EC	NA	NE	NA	NR	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NR	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
		SUM =	34.800		34.800		34.800		34.800	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - East Helena, Montana

Profile Number:41306

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):43

Data Source:Resuspended and analyzed by XRF.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	1.000	0.200	1.100	0.100	1.075	0.077	1.075	NE
7439-95-4	12	MG	2.000	0.700	1.900	0.300	1.925	0.214	1.925	NE
7429-90-5	13	AL	18.000	1.000	9.500	0.500	11.625	0.772	11.625	NE
7440-21-3	14	SI	48.000	2.000	29.000	1.000	33.750	2.060	33.750	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.240	0.150	0.200	0.020	0.210	0.039	0.210	NE
7782-50-5	17	CL	0.200	0.080	0.120	NR	0.140	NE	0.140	NE
7440-09-7	19	K	2.000	0.100	1.800	0.100	1.850	0.101	1.850	NE
7440-70-2	20	CA	1.800	0.100	1.730	0.090	1.747	0.094	1.747	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.760	0.060	0.790	0.040	0.782	0.043	0.782	NE
7440-62-2	23	V	0.030	0.020	0.030	NR	0.030	NE	0.030	NE
7440-47-3	24	CR	0.020	0.020	0.030	NR	0.028	NE	0.028	NE
7439-96-5	25	MN	0.280	0.030	0.170	NR	0.198	NE	0.198	NE
7439-89-6	26	FE	8.500	0.500	6.900	0.300	7.300	0.414	7.300	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.050	0.030	0.020	NR	0.028	NE	0.028	NE
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41306)

	Species		0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.080	0.060	0.010	NR	0.028	NE	0.028	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	82.960		53.300		60.716		60.716	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Idaho

Profile Number:41307

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):42

Data Source:Resuspended and analyzed by XRF.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	1.000	0.200	1.100	0.100	1.075	0.077	1.075	NE
7439-95-4	12	MG	2.000	0.700	1.900	0.300	1.925	0.214	1.925	NE
7429-90-5	13	AL	18.000	1.000	9.500	0.500	11.625	0.772	11.625	NE
7440-21-3	14	SI	48.000	2.000	29.000	1.000	33.750	2.060	33.750	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.240	0.150	0.200	0.020	0.210	0.039	0.210	NE
7782-50-5	17	CL	0.200	0.080	0.120	NR	0.140	NE	0.140	NE
7440-09-7	19	K	2.000	0.100	1.800	0.100	1.850	0.101	1.850	NE
7440-70-2	20	CA	1.800	0.100	1.730	0.090	1.747	0.094	1.747	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.760	0.060	0.790	0.040	0.782	0.043	0.782	NE
7440-62-2	23	V	0.030	0.020	0.030	NR	0.030	NE	0.030	NE
7440-47-3	24	CR	0.020	0.020	0.030	NR	0.028	NE	0.028	NE
7439-96-5	25	MN	0.280	0.030	0.170	NR	0.198	NE	0.198	NE
7439-89-6	26	FE	8.500	0.500	6.900	0.300	7.300	0.414	7.300	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.050	0.030	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	<	NR	0.020	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41307)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.080	0.060	0.010	NR	0.028	NE	0.028	NE
	201	OC	NR	NR	NA	NR	NE	NE	NE	NE
	202	EC	NR	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NR	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NR	NR	NA	NR	NE	NE	NE	NE
		SUM =	82.960		53.300		60.716		60.716	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Creston, Iowa

Profile Number:41308

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):26

Data Source:Resuspended soils analyzed by XRF and carbon oxidation.

SCC : 58

Mass Fraction Data :
  Size interval (um) :   (0-2.5)   (0-6)   (0-10)
  Mass Fraction   :   0.02   0.04   0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	3.109	NE	3.109	NR	3.109	NE	3.109	NR
7440-21-3	14	SI	13.039	NE	13.039	NR	13.039	NE	13.039	NR
7723-14-0	15	P	0.105	NE	0.105	NR	0.105	NE	0.105	NR
7704-34-9	16	S	0.824	NE	0.824	NR	0.824	NE	0.824	NR
7782-50-5	17	CL	0.262	NE	0.262	NR	0.262	NE	0.262	NR
7440-09-7	19	K	0.786	NE	0.786	NR	0.786	NE	0.786	NR
7440-70-2	20	CA	15.195	NE	15.195	NR	15.195	NE	15.195	NR
7440-20-2	21	SC	<	NE	<	NR	<	NE	<	NR
7440-32-6	22	TI	0.199	NE	0.199	NR	0.199	NE	0.199	NR
7440-62-2	23	V	0.014	NE	0.014	NR	0.014	NE	0.014	NR
7440-47-3	24	CR	0.020	NE	0.020	NR	0.020	NE	0.020	NR
7439-96-5	25	MN	0.072	NE	0.072	NR	0.072	NE	0.072	NR
7439-89-6	26	FE	3.390	NE	3.390	NR	3.390	NE	3.390	NR
7440-48-4	27	CO	<	NE	<	NR	<	NE	<	NR
7440-02-0	28	NI	0.006	NE	0.006	NR	0.006	NE	0.006	NR
7440-50-8	29	CU	0.018	NE	0.018	NR	0.018	NE	0.018	NR
7440-66-6	30	ZN	0.047	NE	0.047	NR	0.047	NE	0.047	NR
7440-55-3	31	GA	<	NE	<	NR	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NR	<	NE	<	NR
7440-38-2	33	AS	0.018	NE	0.018	NR	0.018	NE	0.018	NR

continued (profile=41308)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NR	<	NE	<	NR
7726-95-6	35	BR	0.003	NE	0.003	NR	0.003	NE	0.003	NR
7440-17-7	37	RB	<	NE	<	NR	<	NE	<	NR
7440-24-6	38	SR	0.047	NE	0.047	NR	0.047	NE	0.047	NR
7440-67-7	40	ZR	<	NE	<	NR	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NR	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NR	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NR	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NR	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NR	<	NE	<	NR
7440-39-3	56	BA	0.039	NE	0.039	NR	0.039	NE	0.039	NR
7440-45-1	58	CE	<	NE	<	NR	<	NE	<	NR
7439-97-6	80	HG	0.002	NE	0.002	NR	0.002	NE	0.002	NR
7439-92-1	82	PB	0.037	NE	0.037	NR	0.037	NE	0.037	NR
	200	TC	1.791	NE	1.791	NR	1.791	NE	1.791	NR
	203	SO4	NA	NE	NA	NR	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
	206	CO3	28.368	NE	28.368	0.000	28.368	NE	28.368	0.000
		SUM =	67.391		67.391		67.391		67.391	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Council Bluffs, Iowa

Profile Number:41309

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):26

Data Source:Resuspended and analyzed by XRF and carbon oxidation.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(a)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	5.160	NE	5.160	NR	5.160	NE	5.160	NR
7440-21-3	14	SI	21.693	NE	21.693	NR	21.693	NE	21.693	NR
7723-14-0	15	P	0.120	NE	0.120	NR	0.120	NE	0.120	NR
7704-34-9	16	S	0.629	NE	0.629	NR	0.629	NE	0.629	NR
7782-50-5	17	CL	0.198	NE	0.198	NR	0.198	NE	0.198	NR
7440-09-7	19	K	1.138	NE	1.138	NR	1.138	NE	1.138	NR
7440-70-2	20	CA	7.225	NE	7.225	NR	7.225	NE	7.225	NR
7440-20-2	21	SC	<	NE	<	NR	<	NE	<	NR
7440-32-6	22	TI	0.287	NE	0.287	NR	0.287	NE	0.287	NR
7440-62-2	23	V	0.019	NE	0.019	NR	0.019	NE	0.019	NR
7440-47-3	24	CR	0.016	NE	0.016	NR	0.016	NE	0.016	NR
7439-96-5	25	MN	0.068	NE	0.068	NR	0.068	NE	0.068	NR
7439-89-6	26	FE	2.301	NE	2.301	NR	2.301	NE	2.301	NR
7440-48-4	27	CO	<	NE	<	NR	<	NE	<	NR
7440-02-0	28	NI	0.006	NE	0.006	NR	0.006	NE	0.006	NR
7440-50-8	29	CU	0.008	NE	0.008	NR	0.008	NE	0.008	NR
7440-66-6	30	ZN	0.064	NE	0.064	NR	0.064	NE	0.064	NR
7440-55-3	31	GA	<	NE	<	NR	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NR	<	NE	<	NR
7440-38-2	33	AS	0.005	NE	0.005	NR	0.005	NE	0.005	NR

continued (profile=41309)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NR	<	NE	<	NR
7726-95-6	35	BR	0.015	NE	0.015	NR	0.015	NE	0.015	NR
7440-17-7	37	RB	<	NE	<	NR	<	NE	<	NR
7440-24-6	38	SR	0.026	NE	0.026	NR	0.026	NE	0.026	NR
7440-67-7	40	ZR	<	NE	<	NR	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NR	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NR	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NR	<	NE	<	NR
7440-36-0	51	SB	0.209	NE	0.209	NR	0.209	NE	0.209	NR
7440-46-2	55	CS	<	NE	<	NR	<	NE	<	NR
7440-39-3	56	BA	0.049	NE	0.049	NR	0.049	NE	0.049	NR
7440-45-1	58	CE	<	NE	<	NR	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NR	<	NE	<	NR
7439-92-1	82	PB	0.069	NE	0.069	NR	0.069	NE	0.069	NR
	200	TC	2.295	NE	2.295	NR	2.295	NE	2.295	NR
	203	SO4	NA	NE	NA	NR	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
	206	CO3	12.495	NE	12.495	0.000	12.495	NE	12.495	0.000
		SUM =	54.095		54.095		54.095		54.095	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Sioux City, Iowa

Profile Number:41310

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):26

Data Source:Resuspended and anlyzed by XRF and carbon oxidation.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	4.926	NE	4.926	NR	4.926	NE	4.926	NR
7440-21-3	14	SI	20.697	NE	20.697	NR	20.697	NE	20.697	NR
7723-14-0	15	P	0.094	NE	0.094	NR	0.094	NE	0.094	NR
7704-34-9	16	S	0.220	NE	0.220	NR	0.220	NE	0.220	NR
7782-50-5	17	CL	0.100	NE	0.100	NR	0.100	NE	0.100	NR
7440-09-7	19	K	1.055	NE	1.055	NR	1.055	NE	1.055	NR
7440-70-2	20	CA	3.998	NE	3.998	NR	3.998	NE	3.998	NR
7440-20-2	21	SC	<	NE	<	NR	<	NE	<	NR
7440-32-6	22	TI	0.319	NE	0.319	NR	0.319	NE	0.319	NR
7440-62-2	23	V	0.021	NE	0.021	NR	0.021	NE	0.021	NR
7440-47-3	24	CR	0.017	NE	0.017	NR	0.017	NE	0.017	NR
7439-96-5	25	MN	0.153	NE	0.153	NR	0.153	NE	0.153	NR
7439-89-6	26	FE	3.011	NE	3.011	NR	3.011	NE	3.011	NR
7440-48-4	27	CO	<	NE	<	NR	<	NE	<	NR
7440-02-0	28	NI	0.007	NE	0.007	NR	0.007	NE	0.007	NR
7440-50-8	29	CU	0.005	NE	0.005	NR	0.005	NE	0.005	NR
7440-66-6	30	ZN	0.035	NE	0.035	NR	0.035	NE	0.035	NR
7440-55-3	31	GA	<	NE	<	NR	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NR	<	NE	<	NR
7440-38-2	33	AS	0.005	NE	0.005	NR	0.005	NE	0.005	NR

continued (profile=41310)

			0-2.5 um(c)		2.5-10 um(a)		0-10 um(c)		Total Particulate Measured(a)	
CAS	Species No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NE	<	NR	<	NE	<	NR
7726-95-6	35	BR	0.002	NE	0.002	NR	0.002	NE	0.002	NR
7440-17-7	37	RB	<	NE	<	NR	<	NE	<	NR
7440-24-6	38	SR	0.018	NE	0.018	NR	0.018	NE	0.018	NR
7440-67-7	40	ZR	<	NE	<	NR	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NR	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NR	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NR	<	NE	<	NR
7440-36-0	51	SB	0.001	NE	0.001	NR	0.001	NE	0.001	NR
7440-46-2	55	CS	<	NE	<	NR	<	NE	<	NR
7440-39-3	56	BA	0.114	NE	0.114	NR	0.114	NE	0.114	NR
7440-45-1	58	CE	<	NE	<	NR	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NR	<	NE	<	NR
7439-92-1	82	PB	0.042	NE	0.042	NR	0.042	NE	0.042	NR
	200	TC	2.313	NE	2.313	NR	2.313	NE	2.313	NR
	203	SO4	NA	NE	NA	NR	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
	206	CO3	17.971	NE	17.971	0.000	17.971	NE	17.971	0.000
		SUM =	55.124		55.124		55.124		55.124	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Soil Dust - Cedar Rapids, Iowa

Profile Number:41311

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):26

Data Source:Resuspended and analyzed by XRF and carbon oxidation.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	1.906	NE	1.906	NR	1.906	NE	1.906	NR
7440-21-3	14	SI	7.171	NE	7.171	NR	7.171	NE	7.171	NR
7723-14-0	15	P	0.040	NE	0.040	NR	0.040	NE	0.040	NR
7704-34-9	16	S	0.895	NE	0.895	NR	0.895	NE	0.895	NR
7782-50-5	17	CL	0.360	NE	0.360	NR	0.360	NE	0.360	NR
7440-09-7	19	K	0.821	NE	0.821	NR	0.821	NE	0.821	NR
7440-70-2	20	CA	25.808	NE	25.808	NR	25.808	NE	25.808	NR
7440-20-2	21	SC	<	NE	<	NR	<	NE	<	NR
7440-32-6	22	TI	0.088	NE	0.088	NR	0.088	NE	0.088	NR
7440-62-2	23	V	0.005	NE	0.005	NR	0.005	NE	0.005	NR
7440-47-3	24	CR	0.005	NE	0.005	NR	0.005	NE	0.005	NR
7439-96-5	25	MN	0.138	NE	0.138	NR	0.138	NE	0.138	NR
7439-89-6	26	FE	0.865	NE	0.865	NR	0.865	NE	0.865	NR
7440-48-4	27	CO	<	NE	<	NR	<	NE	<	NR
7440-02-0	28	NI	0.005	NE	0.005	NR	0.005	NE	0.005	NR
7440-50-8	29	CU	0.003	NE	0.003	NR	0.003	NE	0.003	NR
7440-66-6	30	ZN	0.029	NE	0.029	NR	0.029	NE	0.029	NR
7440-55-3	31	GA	<	NE	<	NR	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NR	<	NE	<	NR
7440-38-2	33	AS	0.001	NE	0.001	NR	0.001	NE	0.001	NR

continued (profile=41311)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(a)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NE	<	NR	<	NE	<	NR
7726-95-6	35	BR	0.002	NE	0.002	NR	0.002	NE	0.002	NR
7440-17-7	37	RB	<	NE	<	NR	<	NE	<	NR
7440-24-6	38	SR	0.026	NE	0.026	NR	0.026	NE	0.026	NR
7440-67-7	40	ZR	<	NE	<	NR	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NR	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NR	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NR	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NR	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NR	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NR	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NR	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NR	<	NE	<	NR
7439-92-1	82	PB	0.029	NE	0.029	NR	0.029	NE	0.029	NR
	200	TC	3.222	NE	3.222	NR	3.222	NE	3.222	NR
	203	SO4	NA	NE	NA	NR	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
	206	CO3	36.189	NE	36.189	0.000	36.189	NE	36.189	0.000
		SUM =	77.608		77.608		77.608		77.608	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Davenport, Iowa

Profile Number:41312

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):26

Data Source:Resuspended and analyzed by XRF and carbon oxidation.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NR	NA	NE	NA	NR
7440-42-8	5	B	NA	NE	NA	NR	NA	NE	NA	NR
7782-41-4	9	F	NA	NE	NA	NR	NA	NE	NA	NR
7440-23-5	11	NA	NA	NE	NA	NR	NA	NE	NA	NR
7439-95-4	12	MG	NA	NE	NA	NR	NA	NE	NA	NR
7429-90-5	13	AL	2.333	NE	2.333	NR	2.333	NE	2.333	NR
7440-21-3	14	SI	7.958	NE	7.958	NR	7.958	NE	7.958	NR
7723-14-0	15	P	0.057	NE	0.057	NR	0.057	NE	0.057	NR
7704-34-9	16	S	0.663	NE	0.663	NR	0.663	NE	0.663	NR
7782-50-5	17	CL	0.314	NE	0.314	NR	0.314	NE	0.314	NR
7440-09-7	19	K	0.602	NE	0.602	NR	0.602	NE	0.602	NR
7440-70-2	20	CA	20.428	NE	20.428	NR	20.428	NE	20.428	NR
7440-20-2	21	SC	<	NE	<	NR	<	NE	<	NR
7440-32-6	22	TI	0.163	NE	0.163	NR	0.163	NE	0.163	NR
7440-62-2	23	V	0.009	NE	0.009	NR	0.009	NE	0.009	NR
7440-47-3	24	CR	0.011	NE	0.011	NR	0.011	NE	0.011	NR
7439-96-5	25	MN	0.070	NE	0.070	NR	0.070	NE	0.070	NR
7439-89-6	26	FE	1.502	NE	1.502	NR	1.502	NE	1.502	NR
7440-48-4	27	CO	<	NE	<	NR	<	NE	<	NR
7440-02-0	28	NI	0.007	NE	0.007	NR	0.007	NE	0.007	NR
7440-50-8	29	CU	0.014	NE	0.014	NR	0.014	NE	0.014	NR
7440-66-6	30	ZN	0.060	NE	0.060	NR	0.060	NE	0.060	NR
7440-55-3	31	GA	<	NE	<	NR	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NR	<	NE	<	NR
7440-38-2	33	AS	0.008	NE	0.008	NR	0.008	NE	0.008	NR

continued (profile=41312)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(a)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NE	<	NR	<	NE	<	NR
7726-95-6	35	BR	0.003	NE	0.003	NR	0.003	NE	0.003	NR
7440-17-7	37	RB	<	NE	<	NR	<	NE	<	NR
7440-24-6	38	SR	0.052	NE	0.052	NR	0.052	NE	0.052	NR
7440-67-7	40	ZR	<	NE	<	NR	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NR	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NR	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NR	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NR	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NR	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NR	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NR	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NR	<	NE	<	NR
7439-92-1	82	PB	0.123	NE	0.123	NR	0.123	NE	0.123	NR
	200	TC	3.942	NE	3.942	NR	3.942	NE	3.942	NR
	203	SO4	NA	NE	NA	NR	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NR	NA	NE	NA	NR
	206	CO3	37.206	NE	37.206	0.000	37.206	NE	37.206	0.000
		SUM =	75.525		75.525		75.525		75.525	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Spokane, WA

Profile Number:41313

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):27

Data Source:Resuspended and XRF analysis of fine fraction.

SCC : 58

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.02	0.04	0.08

			0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	Species No.	Species	% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	1.866	0.154	1.866	0.154	1.866	0.108	1.866	NE
7429-90-5	13	AL	11.010	0.778	11.010	0.778	11.010	0.615	11.010	NE
7440-21-3	14	SI	27.975	1.935	27.975	1.935	27.975	1.557	27.975	NE
7723-14-0	15	P	0.299	0.031	0.299	0.031	0.299	0.019	0.299	NE
7704-34-9	16	S	0.036	0.096	0.036	0.096	0.036	0.034	0.036	NE
7782-50-5	17	CL	0.112	0.045	0.112	0.045	0.112	0.017	0.112	NE
7440-09-7	19	K	1.545	0.127	1.545	0.127	1.545	0.089	1.545	NE
7440-70-2	20	CA	0.795	0.070	0.795	0.070	0.795	0.047	0.795	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.442	0.040	0.442	0.040	0.442	0.026	0.442	NE
7440-62-2	23	V	0.025	0.009	0.025	0.009	0.025	0.003	0.025	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.240	0.022	0.240	0.022	0.240	0.014	0.240	NE
7439-89-6	26	FE	5.280	0.375	5.280	0.375	5.280	0.295	5.280	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.010	0.008	0.010	0.008	0.010	0.003	0.010	NE
7440-50-8	29	CU	0.180	0.007	0.180	0.007	0.180	0.009	0.180	NE
7440-66-6	30	ZN	0.027	0.007	0.027	0.007	0.027	0.003	0.027	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41313)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	0.013	0.009	0.013	0.009	0.013	0.003	0.013	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	0.053	0.064	0.053	0.064	0.053	0.023	0.053	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.106	0.025	0.106	0.025	0.106	0.010	0.106	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	50.014		50.014		50.014		50.014	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Soil Dust - Boise, Idaho

Profile Number:41314

Profile Data Quality:B/E

Control Device:Not applicable

Reference(s):27

Data Source:Resuspended and XRF analysis of fine fraction.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NE	NA	NE	NA	NE
7440-42-8	5	B	NA	NR	NA	NE	NA	NE	NA	NE
7782-41-4	9	F	NA	NR	NA	NE	NA	NE	NA	NE
7440-23-5	11	NA	NA	NR	NA	NE	NA	NE	NA	NE
7439-95-4	12	MG	0.904	0.068	0.904	NE	0.904	NE	0.904	NE
7429-90-5	13	AL	8.160	0.460	8.160	NE	8.160	NE	8.160	NE
7440-21-3	14	SI	30.273	1.660	30.273	NE	30.273	NE	30.273	NE
7723-14-0	15	P	0.243	0.021	0.243	NE	0.243	NE	0.243	NE
7704-34-9	16	S	0.524	0.080	0.524	NE	0.524	NE	0.524	NE
7782-50-5	17	CL	0.083	0.030	0.083	NE	0.083	NE	0.083	NE
7440-09-7	19	K	1.740	0.122	1.740	NE	1.740	NE	1.740	NE
7440-70-2	20	CA	1.268	0.081	1.268	NE	1.268	NE	1.268	NE
7440-20-2	21	SC	<	NR	<	NE	<	NE	<	NE
7440-32-6	22	TI	0.439	0.032	0.439	NE	0.439	NE	0.439	NE
7440-62-2	23	V	0.033	0.007	0.033	NE	0.033	NE	0.033	NE
7440-47-3	24	CR	<	NR	<	NE	<	NE	<	NE
7439-96-5	25	MN	0.097	0.009	0.097	NE	0.097	NE	0.097	NE
7439-89-6	26	FE	3.406	0.199	3.406	NE	3.406	NE	3.406	NE
7440-48-4	27	CO	<	NR	<	NE	<	NE	<	NE
7440-02-0	28	NI	<	NR	<	NE	<	NE	<	NE
7440-50-8	29	CU	0.007	0.004	0.007	NE	0.007	NE	0.007	NE
7440-66-6	30	ZN	0.081	0.009	0.081	NE	0.081	NE	0.081	NE
7440-55-3	31	GA	<	NR	<	NE	<	NE	<	NE
7440-56-4	32	GE	<	NR	<	NE	<	NE	<	NE
7440-38-2	33	AS	<	NR	<	NE	<	NE	<	NE

continued (profile=41314)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NE	<	NE	<	NE
7726-95-6	35	BR	<	NR	<	NE	<	NE	<	NE
7440-17-7	37	RB	<	NR	<	NE	<	NE	<	NE
7440-24-6	38	SR	0.035	0.007	0.035	NE	0.035	NE	0.035	NE
7440-67-7	40	ZR	<	NR	<	NE	<	NE	<	NE
7440-22-4	47	AG	<	NR	<	NE	<	NE	<	NE
7440-43-9	48	CD	0.068	0.040	0.068	NE	0.068	NE	0.068	NE
7440-31-5	50	SN	<	NR	<	NE	<	NE	<	NE
7440-36-0	51	SB	<	NR	<	NE	<	NE	<	NE
7440-46-2	55	CS	<	NR	<	NE	<	NE	<	NE
7440-39-3	56	BA	<	NR	<	NE	<	NE	<	NE
7440-45-1	58	CE	<	NR	<	NE	<	NE	<	NE
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NE
7439-92-1	82	PB	0.205	0.022	0.205	NE	0.205	NE	0.205	NE
	201	OC	NA	NR	NA	NE	NA	NE	NA	NE
	202	EC	NA	NR	NA	NE	NA	NE	NA	NE
	203	SO4	NA	NR	NA	NE	NA	NE	NA	NE
	204	NO3	NA	NR	NA	NE	NA	NE	NA	NE
		SUM =	47.566		47.566		47.566		47.566	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Soil Dust - Bakersfield, CA

Profile Number:41315

Profile Data Quality:D/E

Control Device:Not applicable

Reference(s):31

Data Source:Average values from 7 locations.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NE	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NE	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NE	NR	NE	NR	NR
7440-23-5	11	NA	0.800	NE	0.800	NE	0.800	NE	0.800	NR
7439-95-4	12	MG	0.600	NE	0.600	NE	0.600	NE	0.600	NR
7429-90-5	13	AL	4.700	NE	4.700	NE	4.700	NE	4.700	NR
7440-21-3	14	SI	14.000	NE	14.000	NE	14.000	NE	14.000	NR
7723-14-0	15	P	<	NE	<	NE	<	NE	<	NR
7704-34-9	16	S	0.500	NE	0.500	NE	0.500	NE	0.500	NR
7782-50-5	17	CL	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7440-09-7	19	K	1.500	NE	1.500	NE	1.500	NE	1.500	NR
7440-70-2	20	CA	1.800	NE	1.800	NE	1.800	NE	1.800	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7440-62-2	23	V	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-47-3	24	CR	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7439-96-5	25	MN	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7439-89-6	26	FE	3.200	NE	3.200	NE	3.200	NE	3.200	NR
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-50-8	29	CU	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-66-6	30	ZN	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NE	<	NE	<	NR

continued (profile=41315)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-17-7	37	RB	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-24-6	38	SR	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-67-7	40	ZR	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-22-4	47	AG	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-43-9	48	CD	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-31-5	50	SN	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-36-0	51	SB	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-46-2	55	CS	0.050	NE	0.050	NE	0.050	NE	0.050	NR
7440-39-3	56	BA	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7440-45-1	58	CE	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7439-97-6	80	HG	0.200	NE	0.200	NE	0.200	NE	0.200	NR
7439-92-1	82	PB	0.200	NE	0.200	NE	0.200	NE	0.200	NR
	201	OC	NR	NE	NR	NE	NR	NE	NR	NR
	202	EC	NR	NE	NR	NE	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NE	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NE	NR	NE	NR	NR
		SUM =	29.050		29.050		29.050		29.050	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Pasedena, CA

Profile Number:41316

Profile Data Quality:D/E

Control Device:Not applicable

Reference(s):30

Data Source:Unspecified analysis of soils.

SCC : 58

Mass Fraction Data :
Size interval (um) : (0-2.5) (0-6) (0-10)
Mass Fraction : 0.02 0.04 0.08

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NR	NE	NR	NR	NR	NE	NR	NR
7440-42-8	5	B	NR	NE	NR	NR	NR	NE	NR	NR
7782-41-4	9	F	NR	NE	NR	NR	NR	NE	NR	NR
7440-23-5	11	NA	2.500	NE	2.500	NR	2.500	NE	2.500	NR
7439-95-4	12	MG	1.400	NE	1.400	NR	1.400	NE	1.400	NR
7429-90-5	13	AL	8.200	NE	8.200	NR	8.200	NE	8.200	NR
7440-21-3	14	SI	20.000	NE	20.000	NR	20.000	NE	20.000	NR
7723-14-0	15	P	NR	NE	NR	NR	NR	NE	NR	NR
7704-34-9	16	S	NR	NE	NR	NR	NR	NE	NR	NR
7782-50-5	17	CL	NR	NE	NR	NR	NR	NE	NR	NR
7440-09-7	19	K	1.500	NE	1.500	NR	1.500	NE	1.500	NR
7440-70-2	20	CA	1.500	NE	1.500	NR	1.500	NE	1.500	NR
7440-20-2	21	SC	NR	NE	NR	NR	NR	NE	NR	NR
7440-32-6	22	TI	0.400	NE	0.400	NR	0.400	NE	0.400	NR
7440-62-2	23	V	0.006	NE	0.006	NR	0.006	NE	0.006	NR
7440-47-3	24	CR	NR	NE	NR	NR	NR	NE	NR	NR
7439-96-5	25	MN	0.110	NE	0.110	NR	0.110	NE	0.110	NR
7439-89-6	26	FE	3.200	NE	3.200	NR	3.200	NE	3.200	NR
7440-48-4	27	CO	0.002	NE	0.002	NR	0.002	NE	0.002	NR
7440-02-0	28	NI	0.004	NE	0.004	NR	0.004	NE	0.004	NR
7440-50-8	29	CU	0.008	NE	0.008	NR	0.008	NE	0.008	NR
7440-66-6	30	ZN	<	NE	<	NR	<	NE	<	NR
7440-55-3	31	GA	NR	NE	NR	NR	NR	NE	NR	NR
7440-56-4	32	GE	NR	NE	NR	NR	NR	NE	NR	NR
7440-38-2	33	AS	NR	NE	NR	NR	NR	NE	NR	NR

continued (profile=41316)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	NR	NE	NR	NR	NR	NE	NR	NR
7726-95-6	35	BR	NR	NE	NR	NR	NR	NE	NR	NR
7440-17-7	37	RB	NR	NE	NR	NR	NR	NE	NR	NR
7440-24-6	38	SR	NR	NE	NR	NR	NR	NE	NR	NR
7440-67-7	40	ZR	NR	NE	NR	NR	NR	NE	NR	NR
7440-22-4	47	AG	NR	NE	NR	NR	NR	NE	NR	NR
7440-43-9	48	CD	NR	NE	NR	NR	NR	NE	NR	NR
7440-31-5	50	SN	NR	NE	NR	NR	NR	NE	NR	NR
7440-36-0	51	SB	NR	NE	NR	NR	NR	NE	NR	NR
7440-46-2	55	CS	NR	NE	NR	NR	NR	NE	NR	NR
7440-39-3	56	BA	0.060	NE	0.060	NR	0.060	NE	0.060	NR
7440-45-1	58	CE	NR	NE	NR	NR	NR	NE	NR	NR
7439-97-6	80	HG	NR	NE	NR	NR	NR	NE	NR	NR
7439-92-1	82	PB	0.020	NE	0.020	NR	0.020	NE	0.020	NR
	201	OC	NR	NE	NR	NR	NR	NE	NR	NR
	202	EC	NR	NE	NR	NR	NR	NE	NR	NR
	203	SO4	NR	NE	NR	NR	NR	NE	NR	NR
	204	NO3	NR	NE	NR	NR	NR	NE	NR	NR
		SUM =	38.910		38.910		38.910		38.910	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Medford, OR

Profile Number:41318

Profile Data Quality:B/C

Control Device:Not applicable

Reference(s):45

Data Source:Composite samples resuspended and samples using a 2-stage virtual impactor.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	1.500	0.500	1.700	0.400	1.650	0.179	1.650	NE
7439-95-4	12	MG	1.900	0.600	1.500	0.300	1.600	0.188	1.600	NE
7429-90-5	13	AL	9.500	0.100	8.900	0.200	9.050	0.464	9.050	NE
7440-21-3	14	SI	26.600	1.400	2.700	1.400	8.675	1.067	8.675	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	0.090	0.040	0.070	0.050	0.075	0.017	0.075	NE
7782-50-5	17	CL	0.070	0.050	NA	NR	NE	NE	NE	NE
7440-09-7	19	K	0.920	0.330	0.750	0.160	0.792	0.101	0.792	NE
7440-70-2	20	CA	1.800	0.400	1.800	0.200	1.800	0.144	1.800	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	1.000	0.100	0.700	0.200	0.775	0.071	0.775	NE
7440-62-2	23	V	0.024	NR	0.033	NR	0.031	NE	0.031	NE
7440-47-3	24	CR	0.024	NR	0.026	NR	0.026	NE	0.026	NE
7439-96-5	25	MN	0.160	0.070	0.180	0.050	0.175	0.023	0.175	NE
7439-89-6	26	FE	5.300	0.600	5.500	0.800	5.450	0.368	5.450	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.007	0.003	0.007	0.003	0.007	0.001	0.007	NE
7440-50-8	29	CU	0.030	0.020	0.030	NR	0.030	NE	0.030	NE
7440-66-6	30	ZN	0.009	0.003	0.011	NR	0.011	NE	0.011	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41318)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.011	NR	NA	NR	NE	NE	NE	NE
	201	OC	4.400	1.700	3.700	0.700	3.875	0.503	3.875	NE
	202	EC	0.600	0.400	0.700	0.700	0.675	0.204	0.675	NE
	203	SO4	0.100	0.040	0.060	0.060	0.070	0.018	0.070	NE
	204	NO3	0.100	0.040	NA	NR	NE	NE	NE	NE
		SUM =	54.145		28.367		34.813		34.813	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Portland OR

Profile Number:41319

Profile Data Quality:A/C

Control Device:Not applicable

Reference(s):46,54

Data Source:Composite of samples which were suspended and sampled with a 2-stagevirtual impactor with a Method 5 heated probe. No dilution air. Analysis by XRF,INNA,IC, and carbon oxidation.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a) % wt.	 Unc.	2.5-10 um(a) % wt.	 Unc.	0-10 um(b) % wt	 Unc.	Total Particulate Measured(c) % wt.	 Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	0.010	0.002	NR	NE	NE	NE	NE
7440-23-5	11	NA	0.690	0.380	1.300	0.500	1.147	0.165	1.147	NE
7439-95-4	12	MG	1.760	0.620	1.200	0.310	1.340	0.189	1.340	NE
7429-90-5	13	AL	11.700	2.200	7.200	1.700	8.325	0.848	8.325	NE
7440-21-3	14	SI	25.400	3.400	29.700	1.500	28.625	1.665	28.625	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.070	0.030	<	NR	NE	NE	NE	NE
7782-50-5	17	CL	<	0.010	<	0.010	NE	NE	NE	NE
7440-09-7	19	K	1.000	0.280	2.200	0.240	1.900	0.126	1.900	NE
7440-70-2	20	CA	0.930	0.370	1.400	0.670	1.282	0.200	1.282	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.760	0.240	0.820	0.150	0.805	0.081	0.805	NE
7440-62-2	23	V	0.025	0.006	0.017	0.006	0.019	0.002	0.019	NE
7440-47-3	24	CR	0.030	0.008	0.010	0.006	0.015	0.003	0.015	NE
7439-96-5	25	MN	0.200	0.090	0.085	0.028	0.114	0.025	0.114	NE
7439-89-6	26	FE	6.800	2.300	4.760	0.850	5.270	0.680	5.270	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	0.004	0.009	0.004	NE	NE	NE	NE
7440-50-8	29	CU	0.020	0.004	0.020	0.004	0.020	0.002	0.020	NE
7440-66-6	30	ZN	0.041	0.026	0.041	0.026	0.041	0.009	0.041	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41319)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	0.010	<	0.010	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.006	0.002	0.042	0.011	0.033	0.003	0.033	NE
	201	OC	4.320	1.700	4.320	1.730	4.320	0.644	4.320	NE
	202	EC	0.590	0.380	0.590	0.380	0.590	0.138	0.590	NE
	203	SO4	NA	0.050	0.004	0.001	NE	NE	NE	NE
	204	NO3	NA	1.000	0.009	0.005	NE	NE	NE	NE
		SUM =	54.342		53.729		53.883		53.883	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Alabama

Profile Number:41320

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):48

Data Source:Resuspended and sampled with a dichotomous sampler.

SCC : 58

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	1.500	0.500	1.700	0.400	1.650	0.179	1.650	NE
7439-95-4	12	MG	1.900	0.600	1.500	0.300	1.600	0.188	1.600	NE
7429-90-5	13	AL	9.500	0.100	8.900	0.200	9.050	0.464	9.050	NE
7440-21-3	14	SI	26.600	1.400	27.000	1.400	26.900	1.429	26.900	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	0.090	0.040	0.070	0.050	0.075	0.017	0.075	NE
7782-50-5	17	CL	0.070	0.050	NA	NR	NE	NE	NE	NE
7440-09-7	19	K	0.920	0.330	0.750	0.160	0,792	0.101	0.792	NE
7440-70-2	20	CA	1.800	0.400	1.800	0.200	1.800	0.144	1.800	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	1.000	0.100	0.700	0.200	0.775	0.071	0.775	NE
7440-62-2	23	V	0.024	NR	0.033	NR	0.031	NE	0.031	NE
7440-47-3	24	CR	0.024	NR	0.026	NR	0.026	NE	0.026	NE
7439-96-5	25	MN	0.160	0.070	0.180	0.050	0.175	0.023	0.175	NE
7439-89-6	26	FE	5.300	0.600	5.500	0.800	5.450	0.368	5.450	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.007	0.003	0.007	0.003	0.007	0.001	0.007	NE
7440-50-8	29	CU	0.030	0.030	0.030	NR	0.030	NE	0.030	NE
7440-66-6	30	ZN	0.009	0.003	0.011	NR	0.011	NE	0.011	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=41320)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.011	NR	NA	NR	NE	NE	NE	NE
	201	OC	4.400	1.700	3.700	0.700	3.875	0.503	3.875	NE
	202	EC	0.600	0.400	0.700	0.700	0.675	0.204	0.675	NE
	203	SO4	0.100	0.040	0.060	0.060	0.070	0.018	0.070	NE
	204	NO3	0.100	0.040	NA	NR	NE	NE	NE	NE
		SUM =	54.145		52.667		53.038		53.038	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Soil Dust - Composite

Profile Number:41350

Profile Data Quality:D

Control Device:Not applicable

Reference(s):26,27,30,31,32,40,42,43,45,46,48,54

Data Source:Developed from profiles 41301,41302,41303,41304,41305,41306,41307,41308,41309,41310,41311,41312,
41313,41314,41315,41316,41318,41319,41320, and 41401.

SCC : 58

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.02	0.04	0.08

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.002	0.000	0.000	0.000	0.001	0.000	0.000
7440-23-5	11	NA	0.299	0.195	0.495	0.176	0.446	0.069	0.237	0.000
7439-95-4	12	MG	0.716	0.334	0.593	0.159	0.624	0.098	0.126	0.000
7429-90-5	13	AL	6.289	0.898	5.547	0.818	5.732	0.424	3.204	0.680
7440-21-3	14	SI	17.014	2.261	16.860	1.576	16.898	1.092	11.143	1.389
7723-14-0	15	P	0.067	0.014	0.057	0.009	0.059	0.005	0.041	0.006
7704-34-9	16	S	0.525	0.494	0.293	0.036	0.351	0.126	0.307	0.023
7782-50-5	17	CL	0.520	0.215	0.567	0.203	0.556	0.079	0.636	0.232
7440-09-7	19	K	0.728	1.083	0.997	0.099	0.930	0.275	0.689	0.047
7440-70-2	20	CA	0.843	0.201	5.518	0.301	4.349	0.217	5.257	0.249
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.335	0.075	0.372	0.077	0.362	0.032	0.171	0.018
7440-62-2	23	V	0.014	0.007	0.016	0.003	0.015	0.002	0.012	0.001
7440-47-3	24	CR	0.011	0.016	0.014	0.002	0.013	0.004	0.013	0.001
7439-96-5	25	MN	0.096	0.037	0.105	0.018	0.103	0.011	0.056	0.003
7439-89-6	26	FE	3.010	0.657	3.325	0.376	3.246	0.247	1.832	0.142
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.004	0.012	0.004	0.002	0.004	0.003	0.008	0.001
7440-50-8	29	CU	0.035	0.015	0.054	0.018	0.050	0.006	0.044	0.018
7440-66-6	30	ZN	0.039	0.025	0.046	0.013	0.045	0.007	0.042	0.011
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.000	0.002	0.000	0.002	0.000	0.002	0.000

continued (profile=41350)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	0.016	0.024	0.002	0.002	0.005	0.006	0.007	0.001
7440-17-7	37	RB	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000
7440-24-6	38	SR	0.005	0.003	0.012	0.002	0.010	0.001	0.014	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000
7440-05-3	46	PD	0.002	0.005	0.000	0.000	0.000	0.001	0.000	0.000
7440-22-4	47	AG	0.003	0.007	0.000	0.000	0.001	0.002	0.003	0.000
7440-43-9	48	CD	0.008	0.024	0.003	0.015	0.004	0.007	0.003	0.000
7440-74-6	49	IN	0.000	0.012	0.000	0.000	0.000	0.003	0.000	0.000
7440-31-5	50	SN	0.002	0.013	0.000	0.000	0.000	0.003	0.003	0.000
7440-36-0	51	SB	0.000	0.025	0.011	0.000	0.008	0.006	0.014	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000
7440-39-3	56	BA	0.000	0.065	0.016	0.000	0.012	0.016	0.042	0.005
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.000
7439-92-1	82	PB	0.053	0.103	0.041	0.008	0.044	0.026	0.050	0.004
	200	TC	0.000	0.000	0.817	0.000	0.613	0.029	0.817	0.000
	201	OC	0.691	0.676	0.617	0.457	0.635	0.207	0.000	0.000
	202	EC	0.094	0.156	0.105	0.243	0.102	0.072	0.000	0.000
	203	SO4	0.011	0.017	0.007	0.019	0.008	0.007	0.000	0.000
	204	NO3	0.011	0.230	0.000	0.001	0.003	0.057	0.000	0.000
	206	CO3	0.000	0.000	8.257	0.000	6.193	0.292	8.257	0.000
		SUM =	31.441		44.753		41.423		33.091	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Marine Aerosol

Profile Number:43101

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):46

Data Source:Estimate - Assumes a Cl:Na ratio of 1. and all constituents(except Cl) retain bulk sea water ratios.

SCC : 114

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.51	0.87

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	40.000	4.000	40.000	4.000	40.000	1.689	40.000	NE
7439-95-4	12	MG	4.800	0.900	4.800	0.900	4.800	0.275	4.800	NE
7429-90-5	13	AL	NA	NR	NA	NR	NE	NE	NE	NE
7440-21-3	14	SI	NA	NR	NA	NR	NE	NE	NE	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	3.300	1.300	3.300	1.300	3.300	0.337	3.300	NE
7782-50-5	17	CL	40.000	10	40.000	10	40.000	NE	40.000	NE
7440-09-7	19	K	1.400	0.200	1.400	0.200	1.400	0.069	1.400	NE
7440-70-2	20	CA	1.400	0.200	1.400	0.200	1.400	0.069	1.400	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	NR	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	<	NR	<	NR	NE	NE	NE	NE
7439-89-6	26	FE	<	NR	<	NR	NE	NE	NE	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=43101)

									Total Particulate	
	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.200	0.050	0.200	0.050	0.200	0.014	0.200	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	10.000	4.000	10.000	4.000	10.000	1.034	10.000	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	101.100		101.100		101.100		101.100	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Volcanic Ash

Profile Number:43301

Profile Data Quality:C/D

Control Device:Not applicable

Reference(s):42

Data Source:Resuspended ash.

SCC : 115

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	3.400	0.100	3.400	0.100	3.400	0.609	3.400	NE
7439-95-4	12	MG	0.800	0.020	0.800	0.020	0.800	0.143	0.800	NE
7429-90-5	13	AL	8.600	0.200	8.600	0.200	8.600	1.529	8.600	NE
7440-21-3	14	SI	32.000	1.000	32.000	1.000	32.000	5.748	32.000	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.040	NR	0.040	NR	0.040	NE	0.040	NE
7782-50-5	17	CL	0.060	0.020	0.060	0.020	0.060	0.027	0.060	NE
7440-09-7	19	K	1.400	0.040	1.400	0.040	1.400	0.251	1.400	NE
7440-70-2	20	CA	2.860	0.080	2.860	0.080	2.860	0.511	2.860	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.330	NR	0.330	NR	0.330	NE	0.330	NE
7440-62-2	23	V	0.010	NR	0.010	NR	0.010	NE	0.010	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.050	NR	0.050	NR	0.050	NE	0.050	NE
7439-89-6	26	FE	2.490	0.070	2.490	0.070	2.490	0.445	2.490	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=43301)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	0.040	NR	0.040	NR	0.040	NE	0.040	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	NA	NR	NA	NR	NE	NE	NE	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	52.080		52.080		52.080		52.080	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.14 WOOD COMBUSTION

Wood is burned in industrial/commercial boilers to obtain heat energy and to alleviate waste disposal problems in the pulp and paper industries. Residential wood burning is commonly used to supplement conventional heating systems. In the industrial sector, the burning of wood waste in boilers is mostly confined to those industries where wood is available as a byproduct. A variety of boiler configurations is used for burning wood waste. These include dutch oven configurations, spreader stokers, and tangentially-fired or cyclone-fired boilers. Residential woodstoves are usually radiating or circulatory designs constructed from cast iron, heavy gauge sheet metal, or stainless steel. Emissions from wood combustion are affected by furnace design and operating conditions, and fuel characteristics such as fuel composition, moisture content, and effective burning surface area.

Profile Name:Wood Stoves - Pine Fuel

Profile Number:42101

Profile Data Quality:A/D

Control Device:Uncontrolled

Reference(s):33

Data Source:Size-resolved samples(fine) taken using a dilution tunnel. XRF and carbon oxidation analysis.
Profile based on emission weighted average of 6 samples.

SCC : 6

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.98	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NE	NA	NE	NA	NE
7440-42-8	5	B	NA	NR	NA	NE	NA	NE	NA	NE
7782-41-4	9	F	NA	NR	NA	NE	NA	NE	NA	NE
7440-23-5	11	NA	NA	NR	NA	NE	NA	NE	NA	NE
7439-95-4	12	MG	NA	NR	NA	NE	NA	NE	NA	NE
7429-90-5	13	AL	NR	NR	NR	NE	NR	NE	NR	NE
7440-21-3	14	SI	NR	NR	NR	NE	NR	NE	NR	NE
7723-14-0	15	P	NR	NR	NR	NE	NR	NE	NR	NE
7704-34-9	16	S	0.100	NR	0.100	NE	0.100	NE	0.100	NE
7782-50-5	17	CL	0.100	NR	0.100	NE	0.100	NE	0.100	NE
7440-09-7	19	K	1.000	NR	1.000	NE	1.000	NE	1.000	NE
7440-70-2	20	CA	<	NR	<	NE	<	NE	<	NE
7440-20-2	21	SC	<	NR	<	NE	<	NE	<	NE
7440-32-6	22	TI	<	NR	<	NE	<	NE	<	NE
7440-62-2	23	V	<	NR	<	NE	<	NE	<	NE
7440-47-3	24	CR	<	NR	<	NE	<	NE	<	NE
7439-96-5	25	MN	<	NR	<	NE	<	NE	<	NE
7439-89-6	26	FE	<	NR	<	NE	<	NE	<	NE
7440-48-4	27	CO	<	NR	<	NE	<	NE	<	NE
7440-02-0	28	NI	<	NR	<	NE	<	NE	<	NE
7440-50-8	29	CU	<	NR	<	NE	<	NE	<	NE
7440-66-6	30	ZN	<	NR	<	NE	<	NE	<	NE
7440-55-3	31	GA	<	NR	<	NE	<	NE	<	NE
7440-56-4	32	GE	<	NR	<	NE	<	NE	<	NE
7440-38-2	33	AS	<	NR	<	NE	<	NE	<	NE

continued (profile=42101)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NE	<	NE	<	NE
7726-95-6	35	BR	<	NR	<	NE	<	NE	<	NE
7440-17-7	37	RB	<	NR	<	NE	<	NE	<	NE
7440-24-6	38	SR	<	NR	<	NE	<	NE	<	NE
7440-67-7	40	ZR	<	NR	<	NE	<	NE	<	NE
7440-22-4	47	AG	<	NR	<	NE	<	NE	<	NE
7440-43-9	48	CD	<	NR	<	NE	<	NE	<	NE
7440-31-5	50	SN	<	NR	<	NE	<	NE	<	NE
7440-36-0	51	SB	<	NR	<	NE	<	NE	<	NE
7440-46-2	55	CS	<	NR	<	NE	<	NE	<	NE
7440-39-3	56	BA	<	NR	<	NE	<	NE	<	NE
7440-45-1	58	CE	<	NR	<	NE	<	NE	<	NE
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NE
7439-92-1	82	PB	<	NR	<	NE	<	NE	<	NE
	201	OC	38.700	NR	38.700	NE	38.700	NE	38.700	NE
	202	EC	4.500	NR	4.500	NE	4.500	NE	4.500	NE
	203	SO4	NA	NR	NA	NE	NA	NE	NA	NE
	204	NO3	NA	NR	NA	NE	NA	NE	NA	NE
		SUM =	44.400		44.400		44.400		44.400	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Wood Stoves - Average, All Fuels

Profile Number:42102

Profile Data Quality:A/D

Control Device:Uncontrolled

Reference(s):33

Data Source:

Size-resolved samples (fine) taken using a dilution tunnel. XRF and carbon oxidation analysis.
Profile based on emission weighted average of 41 samples.

SCC : 6

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.98	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(c) % wt.	2.5-10 um(c) Unc.	0-10 um(c) % wt	0-10 um(c) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7440-41-7	4	BE	NA	NR	NA	NE	NA	NE	NA	NE
7440-42-8	5	B	NA	NR	NA	NE	NA	NE	NA	NE
7782-41-4	9	F	NA	NR	NA	NE	NA	NE	NA	NE
7440-23-5	11	NA	NA	NR	NA	NE	NA	NE	NA	NE
7439-95-4	12	MG	NA	NR	NA	NE	NA	NE	NA	NE
7429-90-5	13	AL	NR	NR	NR	NE	NR	NE	NR	NE
7440-21-3	14	SI	NR	NR	NR	NE	NR	NE	NR	NE
7723-14-0	15	P	NR	NR	NR	NE	NR	NE	NR	NE
7704-34-9	16	S	1.800	NR	1.800	NE	1.800	NE	1.800	NE
7782-50-5	17	CL	0.800	NR	0.800	NE	0.800	NE	0.800	NE
7440-09-7	19	K	8.000	NR	8.000	NE	8.000	NE	8.000	NE
7440-70-2	20	CA	<	NR	<	NE	<	NE	<	NE
7440-20-2	21	SC	<	NR	<	NE	<	NE	<	NE
7440-32-6	22	TI	<	NR	<	NE	<	NE	<	NE
7440-62-2	23	V	<	NR	<	NE	<	NE	<	NE
7440-47-3	24	CR	<	NR	<	NE	<	NE	<	NE
7439-96-5	25	MN	<	NR	<	NE	<	NE	<	NE
7439-89-6	26	FE	<	NR	<	NE	<	NE	<	NE
7440-48-4	27	CO	<	NR	<	NE	<	NE	<	NE
7440-02-0	28	NI	<	NR	<	NE	<	NE	<	NE
7440-50-8	29	CU	<	NR	<	NE	<	NE	<	NE
7440-66-6	30	ZN	<	NR	<	NE	<	NE	<	NE
7440-55-3	31	GA	<	NR	<	NE	<	NE	<	NE
7440-56-4	32	GE	<	NR	<	NE	<	NE	<	NE
7440-38-2	33	AS	<	NR	<	NE	<	NE	<	NE

continued (profile=42102)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NE	<	NE	<	NE
7726-95-6	35	BR	<	NR	<	NE	<	NE	<	NE
7440-17-7	37	RB	<	NR	<	NE	<	NE	<	NE
7440-24-6	38	SR	<	NR	<	NE	<	NE	<	NE
7440-67-7	40	ZR	<	NR	<	NE	<	NE	<	NE
7440-22-4	47	AG	<	NR	<	NE	<	NE	<	NE
7440-43-9	48	CD	<	NR	<	NE	<	NE	<	NE
7440-31-5	50	SN	<	NR	<	NE	<	NE	<	NE
7440-36-0	51	SB	<	NR	<	NE	<	NE	<	NE
7440-46-2	55	CS	<	NR	<	NE	<	NE	<	NE
7440-39-3	56	BA	<	NR	<	NE	<	NE	<	NE
7440-45-1	58	CE	<	NR	<	NE	<	NE	<	NE
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NE
7439-92-1	82	PB	<	NR	<	NE	<	NE	<	NE
	201	OC	35.900	NR	35.900	NE	35.900	NE	35.900	NE
	202	EC	6.400	NR	6.400	NE	6.400	NE	6.400	NE
	203	SO4	NA	NR	NA	NE	NA	NE	NA	NE
	204	NO3	NA	NR	NA	NE	NA	NE	NA	NE
		SUM =	52.900		52.900		52.900		52.900	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Wood Stoves - Oak Fuel

Profile Number:42103

Profile Data Quality:A/D

Control Device:Uncontrolled

Reference(s):33

Data Source:Size-resolved samples (fine) taken using a dilution tunnel. XRF and carbon oxidation analysis.
Profile based on emission weighted average of 6 samples.

SCC : 6

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.98	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NE	NA	NE	NA	NE
7440-42-8	5	B	NA	NR	NA	NE	NA	NE	NA	NE
7782-41-4	9	F	NA	NR	NA	NE	NA	NE	NA	NE
7440-23-5	11	NA	NA	NR	NA	NE	NA	NE	NA	NE
7439-95-4	12	MG	NA	NR	NA	NE	NA	NE	NA	NE
7429-90-5	13	AL	NR	NR	NR	NE	NR	NE	NR	NE
7440-21-3	14	SI	NR	NR	NR	NE	NR	NE	NR	NE
7723-14-0	15	P	NR	NR	NR	NE	NR	NE	NR	NE
7704-34-9	16	S	1.600	NR	1.600	NE	1.600	NE	1.600	NE
7782-50-5	17	CL	1.800	NR	1.800	NE	1.800	NE	1.800	NE
7440-09-7	19	K	7.700	NR	7.700	NE	7.700	NE	7.700	NE
7440-70-2	20	CA	<	NR	<	NE	<	NE	<	NE
7440-20-2	21	SC	<	NR	<	NE	<	NE	<	NE
7440-32-6	22	TI	<	NR	<	NE	<	NE	<	NE
7440-62-2	23	V	<	NR	<	NE	<	NE	<	NE
7440-47-3	24	CR	<	NR	<	NE	<	NE	<	NE
7439-96-5	25	MN	<	NR	<	NE	<	NE	<	NE
7439-89-6	26	FE	<	NR	<	NE	<	NE	<	NE
7440-48-4	27	CO	<	NR	<	NE	<	NE	<	NE
7440-02-0	28	NI	<	NR	<	NE	<	NE	<	NE
7440-50-8	29	CU	<	NR	<	NE	<	NE	<	NE
7440-66-6	30	ZN	<	NR	<	NE	<	NE	<	NE
7440-55-3	31	GA	<	NR	<	NE	<	NE	<	NE
7440-56-4	32	GE	<	NR	<	NE	<	NE	<	NE
7440-38-2	33	AS	<	NR	<	NE	<	NE	<	NE

continued (profile=42103)

	Species	Species	0-2.5 um(a)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NE	<	NE	<	NE
7726-95-6	35	BR	<	NR	<	NE	<	NE	<	NE
7440-17-7	37	RB	<	NR	<	NE	<	NE	<	NE
7440-24-6	38	SR	<	NR	<	NE	<	NE	<	NE
7440-67-7	40	ZR	<	NR	<	NE	<	NE	<	NE
7440-22-4	47	AG	<	NR	<	NE	<	NE	<	NE
7440-43-9	48	CD	<	NR	<	NE	<	NE	<	NE
7440-31-5	50	SN	<	NR	<	NE	<	NE	<	NE
7440-36-0	51	SB	<	NR	<	NE	<	NE	<	NE
7440-46-2	55	CS	<	NR	<	NE	<	NE	<	NE
7440-39-3	56	BA	<	NR	<	NE	<	NE	<	NE
7440-45-1	58	CE	<	NR	<	NE	<	NE	<	NE
7439-97-6	80	HG	<	NR	<	NE	<	NE	<	NE
7439-92-1	82	PB	<	NR	<	NE	<	NE	<	NE
	201	OC	29.200	NR	29.200	NE	29.200	NE	29.200	NE
	202	EC	7.200	NR	7.200	NE	7.200	NE	7.200	NE
	203	SO4	NA	NR	NA	NE	NA	NE	NA	NE
	204	NO3	NA	NR	NA	NE	NA	NE	NA	NE
		SUM =	47.500		47.500		47.500		47.500	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Fireplaces - Softwoods

Profile Number:42201

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):34

Data Source:EC and OC analysis of 7 softwood and 14 hardwood tests using Method 5 train. Potassium values are an average of 3 tests burning pine and spruce.

SCC : 6

Mass Fraction Data :
Size interval (um) : (0-2.5) (0-6) (0-10)
Mass Fraction : 0.98 0.98 0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	NA	NR	NA	NR	NE	NE	NA	NR
7440-21-3	14	SI	NA	NR	NA	NR	NE	NE	NA	NR
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NA	NR
7704-34-9	16	S	NA	NR	NA	NR	NE	NE	NA	NR
7782-50-5	17	CL	NA	NR	NA	NR	NE	NE	NA	NR
7440-09-7	19	K	0.606	NR	0.606	NR	0.606	NE	0.606	NR
7440-70-2	20	CA	NA	NR	NA	NR	NE	NE	NA	NR
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NA	NR
7440-32-6	22	TI	NA	NR	NA	NR	NE	NE	NA	NR
7440-62-2	23	V	NA	NR	NA	NR	NE	NE	NA	NR
7440-47-3	24	CR	NA	NR	NA	NR	NE	NE	NA	NR
7439-96-5	25	MN	NA	NR	NA	NR	NE	NE	NA	NR
7439-89-6	26	FE	NA	NR	NA	NR	NE	NE	NA	NR
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NA	NR
7440-02-0	28	NI	NA	NR	NA	NR	NE	NE	NA	NR
7440-50-8	29	CU	NA	NR	NA	NR	NE	NE	NA	NR
7440-66-6	30	ZN	NA	NR	NA	NR	NE	NE	NA	NR
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NA	NR
7440-56-4	32	GE	NA	NR	NA	NR	NE	NE	NA	NR
7440-38-2	33	AS	NA	NR	NA	NR	NE	NE	NA	NR

continued (profile=42201)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	NA	NR	NA	NR	NE	NE	NA	NR
7726-95-6	35	BR	NA	NR	NA	NR	NE	NE	NA	NR
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NA	NR
7440-24-6	38	SR	NA	NR	NA	NR	NE	NE	NA	NR
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NA	NR
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NA	NR
7440-43-9	48	CD	NA	NR	NA	NR	NE	NE	NA	NR
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NA	NR
7440-36-0	51	SB	NA	NR	NA	NR	NE	NE	NA	NR
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NA	NR
7440-39-3	56	BA	NA	NR	NA	NR	NE	NE	NA	NR
7440-45-1	58	CE	NA	NR	NA	NR	NE	NE	NA	NR
7439-97-6	80	HG	NA	NR	NA	NR	NE	NE	NA	NR
7439-92-1	82	PB	NA	NR	NA	NR	NE	NE	NA	NR
	201	OC	38.000	6.000	38.000	6.000	38.000	11.391	38.000	6.000
	202	EC	33.000	13	33.000	13	33.000	NE	33.000	13
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	71.606		71.606		71.606		71.606	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Fireplaces - Hardwoods

Profile Number:42202

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):34

Data Source:EC and OC analysis of 14 hardwood tests. Potassium values are an average of 3 red oak tests.

SCC : 6

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.98	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	NA	NR	NA	NR	NE	NE	NA	NR
7440-21-3	14	SI	NA	NR	NA	NR	NE	NE	NA	NR
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NA	NR
7704-34-9	16	S	NA	NR	NA	NR	NE	NE	NA	NR
7782-50-5	17	CL	NA	NR	NA	NR	NE	NE	NA	NR
7440-09-7	19	K	1.030	NR	1.030	NR	1.030	NE	1.030	NR
7440-70-2	20	CA	NA	NR	NA	NR	NE	NE	NA	NR
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NA	NR
7440-32-6	22	TI	NA	NR	NA	NR	NE	NE	NA	NR
7440-62-2	23	V	NA	NR	NA	NR	NE	NE	NA	NR
7440-47-3	24	CR	NA	NR	NA	NR	NE	NE	NA	NR
7439-96-5	25	MN	NA	NR	NA	NR	NE	NE	NA	NR
7439-89-6	26	FE	NA	NR	NA	NR	NE	NE	NA	NR
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NA	NR
7440-02-0	28	NI	NA	NR	NA	NR	NE	NE	NA	NR
7440-50-8	29	CU	NA	NR	NA	NR	NE	NE	NA	NR
7440-66-6	30	ZN	NA	NR	NA	NR	NE	NE	NA	NR
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NA	NR
7440-56-4	32	GE	NA	NR	NA	NR	NE	NE	NA	NR
7440-38-2	33	AS	NA	NR	NA	NR	NE	NE	NA	NR

continued (profile=42202)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	NA	NR	NA	NR	NE	NE	NA	NR
7726-95-6	35	BR	NA	NR	NA	NR	NE	NE	NA	NR
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NA	NR
7440-24-6	38	SR	NA	NR	NA	NR	NE	NE	NA	NR
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NA	NR
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NA	NR
7440-43-9	48	CD	NA	NR	NA	NR	NE	NE	NA	NR
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NA	NR
7440-36-0	51	SB	NA	NR	NA	NR	NE	NE	NA	NR
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NA	NR
7440-39-3	56	BA	NA	NR	NA	NR	NE	NE	NA	NR
7440-45-1	58	CE	NA	NR	NA	NR	NE	NE	NA	NR
7439-97-6	80	HG	NA	NR	NA	NR	NE	NE	NA	NR
7439-92-1	82	PB	NA	NR	NA	NR	NE	NE	NA	NR
	201	OC	46.000	7.000	46.000	7.000	46.000	13.514	46.000	7.000
	202	EC	8.000	7.000	8.000	7.000	8.000	10.028	8.000	7.000
	203	SO4	NA	NR	NA	NR	NE	NE	NA	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	55.030		55.030		55.030		55.030	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Residential Wood Combustion - Composite

Profile Number:42303

Profile Data Quality:A/C

Control Device:Uncontrolled

Reference(s):45

Data Source:Average of 16 samples from 8 sources: 45% fireplaces and 55% wood stoves.

SCC : 6

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.98	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(c) % wt.	Total Particulate Measured(c) Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	0.083	0.012	0.083	0.012	0.083	0.024	0.083	NE
7439-95-4	12	MG	0.073	0.017	0.073	0.017	0.073	0.028	0.073	NE
7429-90-5	13	AL	0.021	NR	0.021	NR	0.021	NE	0.021	NE
7440-21-3	14	SI	<	NR	<	NR	NE	NE	NE	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.182	0.019	0.182	0.019	0.182	0.045	0.182	NE
7782-50-5	17	CL	0.509	0.031	0.509	0.031	0.509	0.111	0.509	NE
7440-09-7	19	K	0.860	0.010	0.860	0.010	0.860	0.173	0.860	NE
7440-70-2	20	CA	0.067	NR	0.067	NR	0.067	NE	0.067	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	NR	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	<	NR	<	NR	NE	NE	NE	NE
7439-89-6	26	FE	<	NR	<	NR	NE	NE	NE	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	0.037	NR	0.037	NR	0.037	NE	0.037	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=42303)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	<	NR	<	NR	NE	NE	NE	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	47.500	13	47.500	13	47.500	NE	47.500	NE
	202	EC	12.800	8.400	12.800	8.400	12.800	12.152	12.800	NE
	203	SO4	0.289	0.021	0.289	0.021	0.289	0.065	0.289	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	62.421		62.421		62.421		62.421	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Composite of Residential Wood Burning Sources

Profile Number:42330

Profile Data Quality:D

Control Device:Uncontrolled

Reference(s):34,35,45

Data Source:Developed from profiles 42102,42201,42202, and 42303.

SCC : 6

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.98	0.98	0.98

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-23-5	11	NA	0.021	0.006	0.021	0.006	0.021	0.009	0.000	0.000
7439-95-4	12	MG	0.018	0.009	0.018	0.009	0.018	0.013	0.000	0.000
7429-90-5	13	AL	0.005	0.000	0.005	0.000	0.005	0.001	0.000	0.000
7440-21-3	14	SI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7704-34-9	16	S	0.495	0.009	0.045	0.009	0.495	0.072	0.000	0.000
7782-50-5	17	CL	0.327	0.015	0.127	0.015	0.327	0.054	0.000	0.000
7440-09-7	19	K	2.624	0.005	0.624	0.005	2.624	0.382	0.409	0.000
7440-70-2	20	CA	0.017	0.000	0.017	0.000	0.017	0.003	0.000	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-62-2	23	V	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-47-3	24	CR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-96-5	25	MN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-89-6	26	FE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-50-8	29	CU	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-66-6	30	ZN	0.009	0.000	0.009	0.000	0.009	0.002	0.000	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

continued (profile=42330)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-17-7	37	RB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-22-4	47	AG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-43-9	48	CD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-36-0	51	SB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-92-1	82	PB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	201	OC	41.850	8.298	32.875	8.298	41.850	13.941	21.000	4.610
	202	EC	15.050	8.494	13.450	8.494	15.050	12.346	10.250	7.382
	203	SO4	0.072	0.011	0.072	0.011	0.072	0.021	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		SUM =	60.488		47.263		60.488		31.659	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.15 AGRICULTURAL FIELD BURNING

The amount of particulate emissions from agricultural field burning is dependent on the amount of refuse burned, the moisture content, and the relationship between wind direction and direction of fire advancement. A headfire is a fire which is started at the upwind side of a field and allowed to advance in the direction of the wind. A backfire is started at the downwind side and forced to advance in opposition to the wind. Particulate emissions are typically greater with headfire burns.

Profile Name:Slash Burning

Profile Number:42301

Profile Data Quality:B/C

Control Device:Not applicable

Reference(s):59

Data Source:Mean and standard deviation values of 8 fine particle slash burning samples obtained from plume at ground level. Analyzed by AAS, XRF, IC, and carbon oxidation. 3 smolder phase and 5 active burn phase samples.

SCC : 62 50300201

Mass Fraction Data :

		(0-2.5)	(0-6)	(0-10)
Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.90	0.96	0.99

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-23-5	11	NA	0.067	0.149	0.067	0.149	0.067	0.192	0.067	0.149
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.455	0.298	0.455	0.298	0.455	0.392	0.455	0.298
7440-21-3	14	SI	0.802	0.633	0.802	0.633	0.802	0.827	0.802	0.633
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	0.281	0.220	0.281	0.220	0.281	0.287	0.281	0.220
7782-50-5	17	CL	0.016	0.041	0.016	0.041	0.016	0.053	0.016	0.041
7440-09-7	19	K	0.442	0.202	0.442	0.202	0.442	0.272	0.442	0.202
7440-70-2	20	CA	0.713	0.962	0.713	0.962	0.713	1.244	0.713	0.962
7440-20-2	21	SC	<	0.000	<	0.000	NE	NE	<	0.000
7440-32-6	22	TI	0.010	0.017	0.010	0.017	0.010	0.022	0.010	0.017
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	0.080	0.095	0.080	0.095	0.080	0.123	0.080	0.095
7439-89-6	26	FE	0.342	0.255	0.342	0.255	0.342	0.334	0.342	0.255
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	0.001	0.003	0.001	0.003	0.001	0.004	0.001	0.003
7440-66-6	30	ZN	0.012	0.012	0.012	0.012	0.012	0.016	0.012	0.012
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.010	0.010	0.010	0.010	0.010	0.013	0.010	0.010
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR

continued (profile=42301)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.006	0.009	0.006	0.009	0.006	0.012	0.006	0.009
	200	TC	80.604	6.215	80.604	6.215	80.604	16.692	80.604	6.215
	201	OC	NA	NR	NA	NR	NE	NE	NA	NR
	202	EC	NA	NR	NA	NR	NE	NE	NA	NR
	203	SO4	0.637	0.373	0.637	0.373	0.637	0.493	0.637	0.373
	204	NO3	1.056	1.248	1.056	1.248	1.056	1.616	1.056	1.248
	205	NH4	0.708	0.452	0.708	0.452	0.708	0.595	0.708	0.452
		SUM =	86.242		86.242		86.242		86.242	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Slash Burning

Profile Number:42302

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):45

Data Source:Analysis of 5 filters from 2 slash burns. Samples taken at ground level in plume.

SCC : 62 50300201

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.90	0.96	0.99

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	0.096	0.035	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.144	0.066	0.705	0.205	0.195	0.217	0.195	NE
7440-21-3	14	SI	0.132	0.041	0.930	0.099	0.205	0.155	0.205	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	0.132	0.050	0.990	0.438	0.210	0.421	0.210	NE
7782-50-5	17	CL	0.258	0.118	0.850	1.200	0.312	1.102	0.312	NE
7440-09-7	19	K	0.620	0.235	1.250	0.212	0.677	0.339	0.677	NE
7440-70-2	20	CA	0.868	0.288	5.500	0.600	1.289	0.937	1.289	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	NA	NR	0.045	0.064	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	NA	NR	0.062	0.025	NE	NE	NE	NE
7439-96-5	25	MN	0.280	0.120	1.450	0.212	0.386	0.292	0.386	NE
7439-89-6	26	FE	0.064	0.042	0.430	0.156	0.097	0.157	0.097	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	0.022	0.016	0.052	0.025	0.025	0.028	0.025	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=42302)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.021	NR	0.112	0.067	0.029	NE	0.029	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	<	NR	<	NR	NE	NE	NE	NE
	201	OC	59.250	10	59.000	10	59.227	NE	59.227	NE
	202	EC	9.750	3.590	10.000	3.000	9.773	4.617	9.773	NE
	203	SO4	0.328	0.089	0.130	0.184	0.310	0.191	0.310	NE
	205	NH4	0.220	0.080	1.000	0.560	0.291	0.531	0.291	NE
		SUM =	72.185		82.506		73.123		73.123	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Agricultural Field Burning

Profile Number:42304

Profile Data Quality:C/E

Control Device:Not applicable

Reference(s):46

Data Source:Average of 10 aircraft plume samples taken with a 2-stage virtual impactor with a Method 5 heated probe. No dilution air. Analysis by XRF,INNA,IC, and carbon oxidation.

SCC : 62 50300201

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.90	0.96	0.99

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	0.320	0.150	0.320	0.150	0.320	0.201	0.320	NE
7440-23-5	11	NA	0.240	0.340	0.240	0.340	0.240	0.439	0.240	NE
7439-95-4	12	MG	<	NR	<	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.340	0.300	0.340	0.300	0.340	0.391	0.340	NE
7440-21-3	14	SI	0.300	0.200	0.300	0.200	0.300	0.263	0.300	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	1.500	0.700	1.500	0.700	1.500	0.940	1.500	NE
7782-50-5	17	CL	3.100	2.000	3.100	2.000	3.100	2.632	3.100	NE
7440-09-7	19	K	5.900	2.500	5.900	2.500	5.900	3.388	5.900	NE
7440-70-2	20	CA	0.400	0.300	0.400	0.300	0.400	0.392	0.400	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.005	0.005	0.005	0.005	0.005	0.006	0.005	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	0.005	0.007	0.005	0.007	0.005	0.009	0.005	NE
7439-96-5	25	MN	0.004	0.005	0.004	0.005	0.004	0.006	0.004	NE
7439-89-6	26	FE	0.200	0.600	0.200	0.600	0.200	0.772	0.200	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.110	0.400	0.110	0.400	0.110	0.515	0.110	NE
7440-66-6	30	ZN	<	NR	<	NR	NE	NE	NE	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

continued (profile=42304)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.030	0.040	0.030	0.040	0.030	0.052	0.030	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.030	0.040	0.030	0.040	0.030	0.052	0.030	NE
	201	OC	35.600	10	35.600	10	35.600	NE	35.600	NE
	202	EC	5.800	1.740	5.800	1.740	5.800	2.473	5.800	NE
	203	SO4	5.000	4.300	5.000	4.300	5.000	5.603	5.000	NE
	204	NO3	0.890	0.900	0.890	0.900	0.890	1.168	0.890	NE
		SUM =	59.774		59.774		59.774		59.774	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Field Burning - Composite

Profile Number:42320

Profile Data Quality:D

Control Device:Not applicable

Reference(s):46,45,59

Data Source:Developed from profiles 42301,42302, and 42304.

SCC : 62 50300201

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.90	0.96	0.99

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.107	0.087	0.107	0.087	0.107	0.113	0.000	0.000
7440-23-5	11	NA	0.134	0.215	0.102	0.214	0.131	0.277	0.022	0.086
7439-95-4	12	MG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7429-90-5	13	AL	0.313	0.247	0.500	0.271	0.330	0.342	0.152	0.172
7440-21-3	14	SI	0.411	0.384	0.677	0.388	0.436	0.506	0.267	0.365
7723-14-0	15	P	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7704-34-9	16	S	0.638	0.425	0.924	0.493	0.664	0.609	0.094	0.127
7782-50-5	17	CL	1.125	1.157	1.322	1.347	1.143	1.629	0.005	0.024
7440-09-7	19	K	2.321	1.454	2.531	1.453	2.340	1.921	0.147	0.117
7440-70-2	20	CA	0.660	0.605	2.204	0.677	0.801	0.877	0.238	0.555
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.005	0.010	0.020	0.038	0.006	0.036	0.003	0.010
7440-62-2	23	V	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-47-3	24	CR	0.002	0.004	0.022	0.015	0.004	0.014	0.000	0.000
7439-96-5	25	MN	0.121	0.088	0.511	0.134	0.157	0.161	0.027	0.055
7439-89-6	26	FE	0.202	0.377	0.324	0.387	0.213	0.494	0.114	0.147
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-50-8	29	CU	0.037	0.231	0.037	0.231	0.037	0.297	0.000	0.002
7440-66-6	30	ZN	0.011	0.012	0.021	0.016	0.012	0.018	0.004	0.007
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

continued (profile=42320)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	0.020	0.024	0.051	0.045	0.023	0.047	0.003	0.006
7440-17-7	37	RB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-22-4	47	AG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-43-9	48	CD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-36-0	51	SB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-92-1	82	PB	0.012	0.024	0.012	0.024	0.012	0.031	0.002	0.005
	200	TC	26.868	3.588	26.868	3.588	26.868	6.719	26.868	3.588
	201	OC	31.617	8.700	31.533	8.477	31.609	12.446	0.000	0.000
	202	EC	5.183	2.303	5.267	2.002	5.191	2.933	0.000	0.000
	203	SO4	1.988	2.492	1.922	2.494	1.982	3.225	0.212	0.215
	204	NO3	0.649	0.888	0.649	0.888	0.649	1.148	0.352	0.721
	205	NH4	0.309	0.265	0.569	0.415	0.333	0.456	0.236	0.261
		SUM =	72.733		76.173		73.048		28.746	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.16 MOBILE SOURCES

Because of their widespread use, the internal combustion gasoline powered engine in mobile applications is a major source of PM emissions. Automotive PM emissions typically consist of exhaust emissions that occur from the tailpipe.

Profile Name:Light Duty Vehicles-Leaded

Profile Number:31101

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):22

Data Source:Assumes 2g Pb/gal fuel and 30% of fuel Pb is emitted as particles <9um. SO4 based on .05% S in fuel and emission factor estimates. CASS profile No. 54.

SCC : 27 28 29 30

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.45	0.58	0.64

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NA	NA	NA	NE	NE	NE	NE
7440-42-8	5	B	NA	NA	NA	NA	NE	NE	NE	NE
7782-41-4	9	F	NA	NA	NA	NA	NE	NE	NE	NE
7440-23-5	11	NA	NA	NA	NA	NA	NE	NE	NE	NE
7439-95-4	12	MG	NA	NA	NA	NA	NE	NE	NE	NE
7429-90-5	13	AL	0.043	NR	0.043	NR	0.043	NE	0.043	NE
7440-21-3	14	SI	0.075	NR	0.075	NR	0.075	NE	0.075	NE
7723-14-0	15	P	NR	NR	NR	NR	NE	NE	NE	NE
7704-34-9	16	S	NR	NR	NR	NR	NE	NE	NE	NE
7782-50-5	17	CL	5.400	NR	5.400	NR	5.400	NE	5.400	NE
7440-09-7	19	K	NR	NR	NR	NR	NE	NE	NE	NE
7440-70-2	20	CA	NR	NR	NR	NR	NE	NE	NE	NE
7440-20-2	21	SC	NR	NR	NR	NR	NE	NE	NE	NE
7440-32-6	22	TI	NR	NR	NR	NR	NE	NE	NE	NE
7440-62-2	23	V	NR	NR	NR	NR	NE	NE	NE	NE
7440-47-3	24	CR	NR	NR	NR	NR	NE	NE	NE	NE
7439-96-5	25	MN	NR	NR	NR	NR	NE	NE	NE	NE
7439-89-6	26	FE	0.250	NR	0.250	NR	0.250	NE	0.250	NE
7440-48-4	27	CO	NR	NR	NR	NR	NE	NE	NE	NE
7440-02-0	28	NI	NR	NR	NR	NR	NE	NE	NE	NE
7440-50-8	29	CU	0.004	NR	0.004	NR	0.004	NE	0.004	NE
7440-66-6	30	ZN	0.021	NR	0.021	NR	0.021	NE	0.021	NE
7440-55-3	31	GA	NR	NR	NR	NR	NE	NE	NE	NE
7440-56-4	32	GE	NR	NR	NR	NR	NE	NE	NE	NE
7440-38-2	33	AS	NR	NR	NR	NR	NE	NE	NE	NE

continued (profile=31101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	NR	NR	NR	NR	NE	NE	NE	NE
7726-95-6	35	BR	8.200	NR	8.200	NR	8.200	NE	8.200	NE
7440-17-7	37	RB	NR	NR	NR	NR	NE	NE	NE	NE
7440-24-6	38	SR	NR	NR	NR	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NR	NR	NR	NR	NE	NE	NE	NE
7440-22-4	47	AG	NR	NR	NR	NR	NE	NE	NE	NE
7440-43-9	48	CD	NR	NR	NR	NR	NE	NE	NE	NE
7440-31-5	50	SN	NR	NR	NR	NR	NE	NE	NE	NE
7440-36-0	51	SB	NR	NR	NR	NR	NE	NE	NE	NE
7440-46-2	55	CS	NR	NR	NR	NR	NE	NE	NE	NE
7440-39-3	56	BA	NR	NR	NR	NR	NE	NE	NE	NE
7440-45-1	58	CE	NR	NR	NR	NR	NE	NE	NE	NE
7439-97-6	80	HG	NR	NR	NR	NR	NE	NE	NE	NE
7439-92-1	82	PB	21.100	NR	21.100	NR	21.100	NE	21.100	NE
	201	OC	50.100	NR	50.100	NR	50.100	NE	50.100	NE
	202	EC	NA	NR	NA	NR	NE	NE	NE	NE
	203	SO4	0.210	NR	0.210	NR	0.210	NE	0.210	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	85.403		85.403		85.403		85.403	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Heavy Duty Vehicles - Leaded

Profile Number:31102

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):25

Data Source:Mean of 4 samples tested on a chassis dynamometer with dilution tunnel. Analyzed by XRF and organic extraction.

SCC : 35 36 37 38

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.45	0.58	0.64

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(c)		0-10 um(c)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NA
7440-42-8	5	B	NA	NE	NA	NE	NA	NE	NA	NA
7782-41-4	9	F	NA	NE	NA	NE	NA	NE	NA	NA
7440-23-5	11	NA	NA	NE	NA	NE	NA	NE	NA	NA
7439-95-4	12	MG	NA	NE	NA	NE	NA	NE	NA	NA
7429-90-5	13	AL	0.140	NE	0.140	NE	0.140	NE	0.140	NR
7440-21-3	14	SI	<	NE	<	NE	<	NE	<	NR
7723-14-0	15	P	0.070	NE	0.070	NE	0.070	NE	0.070	NR
7704-34-9	16	S	<	NE	<	NE	<	NE	<	NR
7782-50-5	17	CL	3.500	NE	3.500	NE	3.500	NE	3.500	NR
7440-09-7	19	K	<	NE	<	NE	<	NE	<	NR
7440-70-2	20	CA	0.120	NE	0.120	NE	0.120	NE	0.120	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	<	NE	<	NE	<	NE	<	NR
7440-62-2	23	V	<	NE	<	NE	<	NE	<	NR
7440-47-3	24	CR	<	NE	<	NE	<	NE	<	NR
7439-96-5	25	MN	0.030	NE	0.030	NE	0.030	NE	0.030	NR
7439-89-6	26	FE	3.100	NE	3.100	NE	3.100	NE	3.100	NR
7440-48-4	27	CO	<	NE	<	NE	<	NE	<	NR
7440-02-0	28	NI	<	NE	<	NE	<	NE	<	NR
7440-50-8	29	CU	<	NE	<	NE	<	NE	<	NR
7440-66-6	30	ZN	0.120	NE	0.120	NE	0.120	NE	0.120	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	<	NE	<	NE	<	NE	<	NR

continued (profile=31102)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	13.840	NE	13.840	NE	13.840	NE	13.840	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	<	NE	<	NE	<	NE	<	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	<	NE	<	NE	<	NE	<	NR
7440-43-9	48	CD	<	NE	<	NE	<	NE	<	NR
7440-31-5	50	SN	<	NE	<	NE	<	NE	<	NR
7440-36-0	51	SB	<	NE	<	NE	<	NE	<	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	<	NE	<	NE	<	NE	<	NR
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	30.350	NE	30.350	NE	30.350	NE	30.350	NR
	201	OC	NA	NE	NA	NE	NA	NE	NA	NR
	202	EC	NA	NE	NA	NE	NA	NE	NA	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	51.270		51.270		51.270		51.270	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Light Duty Vehicles - Unleaded

Profile Number:31201

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):22

Data Source:CASS Profile No. 53.

SCC : 27 28 29 30

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.89	0.93	0.97

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NE	NE
7429-90-5	13	AL	0.120	NR	0.120	NR	0.120	NE	0.120	NE
7440-21-3	14	SI	0.510	NR	0.510	NR	0.510	NE	0.510	NE
7723-14-0	15	P	NR	NR	NR	NR	NE	NE	NE	NE
7704-34-9	16	S	NR	NR	NR	NR	NE	NE	NE	NE
7782-50-5	17	CL	NR	NR	NR	NR	NE	NE	NE	NE
7440-09-7	19	K	0.044	NR	0.044	NR	0.044	NE	0.044	NE
7440-70-2	20	CA	0.170	NR	0.170	NR	0.170	NE	0.170	NE
7440-20-2	21	SC	NR	NR	NR	NR	NE	NE	NE	NE
7440-32-6	22	TI	NR	NR	NR	NR	NE	NE	NE	NE
7440-62-2	23	V	NR	NR	NR	NR	NE	NE	NE	NE
7440-47-3	24	CR	NR	NR	NR	NR	NE	NE	NE	NE
7439-96-5	25	MN	0.015	NR	0.015	NR	0.015	NE	0.015	NE
7439-89-6	26	FE	0.110	NR	0.110	NR	0.110	NE	0.110	NE
7440-48-4	27	CO	NR	NR	NR	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.015	NR	0.015	NR	0.015	NE	0.015	NE
7440-50-8	29	CU	0.024	NR	0.024	NR	0.024	NE	0.024	NE
7440-66-6	30	ZN	0.080	NR	0.080	NR	0.080	NE	0.080	NE
7440-55-3	31	GA	NR	NR	NR	NR	NE	NE	NE	NE
7440-56-4	32	GE	NR	NR	NR	NR	NE	NE	NE	NE
7440-38-2	33	AS	NR	NR	NR	NR	NE	NE	NE	NE

nued (profile=31201)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	NR	NR	NR	NR	NE	NE	NE	NE
7726-95-6	35	BR	NR	NR	NR	NR	NE	NE	NE	NE
7440-17-7	37	RB	NR	NR	NR	NR	NE	NE	NE	NE
7440-24-6	38	SR	NR	NR	NR	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NR	NR	NR	NR	NE	NE	NE	NE
7440-22-4	47	AG	NR	NR	NR	NR	NE	NE	NE	NE
7440-43-9	48	CD	NR	NR	NR	NR	NE	NE	NE	NE
7440-31-5	50	SN	NR	NR	NR	NR	NE	NE	NE	NE
7440-36-0	51	SB	NR	NR	NR	NR	NE	NE	NE	NE
7440-46-2	55	CS	NR	NR	NR	NR	NE	NE	NE	NE
7440-39-3	56	BA	NR	NR	NR	NR	NE	NE	NE	NE
7440-45-1	58	CE	NR	NR	NR	NR	NE	NE	NE	NE
7439-97-6	80	HG	NR	NR	NR	NR	NE	NE	NE	NE
7439-92-1	82	PB	NR	NR	NR	NR	NE	NE	NE	NE
	201	OC	21.100	NR	21.100	NR	21.100	NE	21.100	NE
	202	EC	17.800	NR	17.800	NR	17.800	NE	17.800	NE
	203	SO4	50.000	NR	50.000	NR	50.000	NE	50.000	NE
	204	NO3	NR	NR	NR	NR	NE	NE	NE	NE
		SUM =	89.988		89.988		89.988		89.988	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Light Duty Vehicles - Composite

Profile Number:31230

Profile Data Quality:D

Control Device:Uncontrolled

Reference(s):22

Data Source:Developed from profiles 31101 and 31201.

SCC : 27 28 29 30

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.67	0.75	0.80

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7429-90-5	13	AL	0.054	0.000	0.054	0.000	0.054	0.009	0.047	0.000
7440-21-3	14	SI	0.195	0.000	0.195	0.000	0.195	0.033	0.000	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	0.000	0.000	0.023	0.000
7704-34-9	16	S	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7782-50-5	17	CL	1.800	0.000	1.800	0.000	1.800	0.302	1.167	0.000
7440-09-7	19	K	0.015	0.000	0.015	0.000	0.015	0.002	0.000	0.000
7440-70-2	20	CA	0.057	0.000	0.057	0.000	0.057	0.009	0.040	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-62-2	23	V	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-47-3	24	CR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-96-5	25	MN	0.005	0.000	0.005	0.000	0.005	0.001	0.010	0.000
7439-89-6	26	FE	0.120	0.000	0.120	0.000	0.120	0.020	1.033	0.000
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.005	0.000	0.005	0.000	0.005	0.001	0.000	0.000
7440-50-8	29	CU	0.009	0.000	0.009	0.000	0.009	0.002	0.000	0.000
7440-66-6	30	ZN	0.034	0.000	0.034	0.000	0.034	0.006	0.040	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

nued (profile=31230)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	2.733	0.000	2.733	0.000	2.733	0.458	4.613	0.000
7440-17-7	37	RB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-22-4	47	AG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-43-9	48	CD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-36-0	51	SB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-92-1	82	PB	7.033	0.000	7.033	0.000	7.033	1.178	10.117	0.000
	201	OC	23.733	0.000	23.733	0.000	23.733	3.975	0.000	0.000
	202	EC	5.933	0.000	5.933	0.000	5.933	0.994	0.000	0.000
	203	SO4	16.737	0.000	16.737	0.000	16.737	2.803	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		SUM =	58.463		58.463		58.463		17.090	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Light Duty Vehicles - Diesel

Profile Number:32101

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):20

Data Source:Based on 4-stroke engine burning No. 2 diesel fuel of .81% S content

SCC : 111

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.92	0.96	1.00

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NA	NR
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NA	NR
7439-95-4	12	MG	NA	NR	NA	NR	NE	NE	NA	NR
7429-90-5	13	AL	0.110	NR	0.110	NR	0.110	NE	0.110	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	0.032	NR	0.032	NR	0.032	NE	0.032	NR
7704-34-9	16	S	0.700	NR	0.700	NR	0.700	NE	0.700	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	<	NR	<	NR	NE	NE	<	NR
7440-70-2	20	CA	0.120	NR	0.120	NR	0.120	NE	0.120	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	0.250	NR	0.250	NR	0.250	NE	0.250	NR
7439-89-6	26	FE	0.330	NR	0.330	NR	0.330	NE	0.330	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	<	NR	<	NR	NE	NE	<	NR
7440-66-6	30	ZN	0.067	NR	0.067	NR	0.067	NE	0.067	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR

nued (profile=32101)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	0.420	NR	0.420	NR	0.420	NE	0.420	NR
	200	TC	73.000	5.700	73.000	5.700	73.000	15.343	73.000	5.700
	201	OC	21.900	NR	21.900	NR	21.900	NE	21.900	NR
	202	EC	51.100	NR	51.000	NR	51.092	NE	51.000	NR
	203	SO4	2.100	NR	2.100	NR	2.100	NE	2.100	NR
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	150.129		150.029		150.121		150.029	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Heavy Duty Diesel

Profile Number:32202

Profile Data Quality:A/C

Control Device:Uncontrolled

Reference(s):41,56

Data Source:All 3 size fractions assumed similar composition.

SCC : 40 41 42 43

Mass Fraction Data :

Size interval (um) : (0-2.5) (0-6) (0-10)

Mass Fraction : 0.92 0.96 1.00

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	0.130	0.020	0.130	0.020	0.130	0.035	0.130	0.020
7782-41-4	9	F	<	NR	<	NR	NE	NE	<	NR
7440-23-5	11	NA	0.800	0.100	0.800	0.100	0.800	0.196	0.800	0.100
7439-95-4	12	MG	0.900	0.150	0.900	0.150	0.900	0.256	0.900	0.150
7429-90-5	13	AL	1.000	0.200	1.000	0.200	1.000	0.319	1.000	0.200
7440-21-3	14	SI	1.600	0.200	1.600	0.200	1.600	0.393	1.600	0.200
7723-14-0	15	P	0.150	0.020	0.150	0.020	0.150	0.038	0.150	0.020
7704-34-9	16	S	2.700	NR	2.700	NR	2.700	NE	2.700	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	0.170	0.030	0.170	0.030	0.170	0.050	0.170	0.030
7440-70-2	20	CA	0.700	0.200	0.700	0.200	0.700	0.290	0.700	0.200
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.014	0.004	0.014	0.004	0.014	0.006	0.014	0.004
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.002	0.001	0.002	0.001	0.002	0.001	0.002	0.001
7439-96-5	25	MN	0.039	0.004	0.039	0.004	0.039	0.009	0.039	0.004
7439-89-6	26	FE	0.600	0.100	0.600	0.100	0.600	0.171	0.600	0.100
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	0.003	0.001	0.003	0.001	0.003	0.001	0.003	0.001
7440-50-8	29	CU	0.025	0.010	0.025	0.010	0.025	0.014	0.025	0.010
7440-66-6	30	ZN	0.160	0.010	0.160	0.010	0.160	0.032	0.160	0.010
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

nued (profile=32202)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	0.000	NR	0.000	NR	0.000	NE	0.000	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.014	0.003	0.014	0.003	0.014	0.005	0.014	0.003
7440-67-7	40	ZR	0.004	0.001	0.004	0.001	0.004	0.001	0.004	0.001
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.077	0.003	0.077	0.003	0.077	0.015	0.077	0.003
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	1.300	0.300	1.300	0.300	1.300	0.458	1.300	0.300
	201	OC	20.900	NR	20.900	0.140	20.900	NE	20.900	0.140
	202	EC	54.800	NR	54.800	NR	54.800	NE	54.800	NR
	203	SO4	4.900	0.900	4.900	0.900	4.900	1.478	4.900	0.900
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	90.988		90.988		90.988		90.988	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Leaded/Unleaded Gasoline Composite - 1977

Profile Number:33001

Profile Data Quality:A/C

Control Device:Uncontrolled

Reference(s):41

Data Source:Assumed a 39% unleaded and 53% leaded vehicle mix. Based on AAS, XRFICAP, INNA, IC, carbon combustion of <5.5 and <40um samples. All 3 size fractions assumed similar.

SCC : 110

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.67	0.75	0.80

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NA	NR
7440-42-8	5	B	0.059	0.110	0.059	0.110	0.059	0.131	0.059	0.110
7782-41-4	9	F	<	NR	<	NR	NE	NE	<	NR
7440-23-5	11	NA	0.169	0.700	0.169	0.700	0.169	0.830	0.169	0.700
7439-95-4	12	MG	1.099	0.600	1.099	0.600	1.099	0.734	1.099	0.600
7429-90-5	13	AL	0.254	0.900	0.254	0.900	0.254	1.067	0.254	0.900
7440-21-3	14	SI	0.845	1.300	0.845	1.300	0.845	1.546	0.845	1.300
7723-14-0	15	P	0.110	0.110	0.110	0.110	0.110	0.132	0.110	0.110
7704-34-9	16	S	0.761	NR	0.761	NR	0.761	NE	0.761	NR
7782-50-5	17	CL	1.352	0.800	1.352	0.800	1.352	0.974	1.352	0.800
7440-09-7	19	K	0.254	0.200	0.254	0.200	0.254	0.241	0.254	0.200
7440-70-2	20	CA	2.113	0.700	2.113	0.700	2.113	0.901	2.113	0.700
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	0.008	0.020	0.008	0.020	0.008	0.024	0.008	0.020
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	0.001	0.006	0.001	0.006	0.001	0.007	0.001	0.006
7439-96-5	25	MN	0.135	0.025	0.135	0.025	0.135	0.037	0.135	0.025
7439-89-6	26	FE	0.507	0.600	0.507	0.600	0.507	0.716	0.507	0.600
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	.0	NR	.0	NR	NE	NE	.0	NR
7440-50-8	29	CU	0.059	0.030	0.059	0.030	0.059	0.037	0.059	0.030
7440-66-6	30	ZN	0.068	0.080	0.068	0.080	0.068	0.095	0.068	0.080
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

nued (profile=33001)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	9.464	0.900	9.464	0.900	9.464	1.910	9.464	0.900
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	0.010	0.016	0.010	0.016	0.010	0.019	0.010	0.016
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	0.002	0.009	0.002	0.009	0.002	0.011	0.002	0.009
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	0.059	0.020	0.059	0.020	0.059	0.026	0.059	0.020
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	20.280	NR	20.280	NR	20.280	NE	20.280	NR
	200	TC	56.615	42	56.615	42	56.615	NE	56.615	42
	202	EC	<	NR	<	NR	NE	NE	<	NR
	203	SO4	5.915	3.000	5.915	3.000	5.915	3.689	5.915	3.000
	204	NO3	NA	NR	NA	NR	NE	NE	NA	NR
		SUM =	100.139		100.139		100.139		100.139	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Transportation Composite - Medford, OR (1980)

Profile Number:33002

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):45

Data Source:Includes emissions from leaded and unleaded gasoline, diesel, and tire wear.

SCC : 110

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.75	0.82	0.87

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	0.083	0.012	0.083	0.012	0.083	0.020	0.083	NE
7439-95-4	12	MG	0.860	0.740	0.850	0.730	0.859	0.908	0.859	NE
7429-90-5	13	AL	0.140	0.130	NA	NR	NE	NE	NE	NE
7440-21-3	14	SI	0.590	0.220	0.280	0.110	0.547	0.226	0.547	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	3.920	4.950	3.110	3.930	3.808	5.483	3.808	NE
7782-50-5	17	CL	2.350	0.780	1.690	0.560	2.259	0.900	2.259	NE
7440-09-7	19	K	<	NR	<	NR	NE	NE	NE	NE
7440-70-2	20	CA	1.170	1.550	0.560	0.740	1.086	1.489	1.086	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	0.320	0.370	NA	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	<	NR	<	NR	NE	NE	NE	NE
7439-89-6	26	FE	1.850	1.790	1.130	1.100	1.751	1.830	1.751	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	0.090	0.090	0.280	0.280	0.116	0.256	0.116	NE
7440-55-3	31	GA	NA	NR	NA	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

nued (profile=33002)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	5.320	1.810	3.670	1.250	5.092	2.053	5.092	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	13.800	2.070	9.600	1.440	13.221	2.988	13.221	NE
	201	OC	43.120	8.620	38.420	7.680	42.472	12.191	42.472	NE
	202	EC	26.120	9.660	40.960	15	28.167	NE	28.167	NE
	203	SO4	NA	NR	NA	NR	NE	NE	NE	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
		SUM =	99.733		100.633		99.858		99.858	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Transportation Composite - Portland, OR. (1979)

Profile Number:33003

Profile Data Quality:C/D

Control Device:Uncontrolled

Reference(s):46

Data Source:Composite leaded and unleaded exhaust based on tunnel studies and exhaust measurements. Sampled with a 2-stage virtual impactor with a Method 5 heated probe. No dilution air. Analysis by XRF, INNA, IC, and carbon oxidation.

SCC : 110

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.67	0.75	0.80

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	0.010	NA	0.010	NE	NE	NE	NE
7440-23-5	11	NA	NA	0.050	NA	0.050	NE	NE	NE	NE
7439-95-4	12	MG	NA	0.500	NA	0.500	NE	NE	NE	NE
7429-90-5	13	AL	1.100	0.500	1.100	0.500	1.100	0.620	1.100	NE
7440-21-3	14	SI	0.820	0.300	0.820	0.300	0.820	0.381	0.820	NE
7723-14-0	15	P	<	NR	<	NR	NE	NE	NE	NE
7704-34-9	16	S	0.400	0.130	0.400	0.130	0.400	0.168	0.400	NE
7782-50-5	17	CL	3.000	1.000	3.000	1.000	3.000	1.287	3.000	NE
7440-09-7	19	K	0.072	0.029	0.072	0.029	0.072	0.036	0.072	NE
7440-70-2	20	CA	1.250	0.500	1.250	0.500	1.250	0.628	1.250	NE
7440-20-2	21	SC	<	NR	<	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	0.100	<	0.100	NE	NE	NE	NE
7440-62-2	23	V	<	0.005	<	0.005	NE	NE	NE	NE
7440-47-3	24	CR	<	0.010	<	0.010	NE	NE	NE	NE
7439-96-5	25	MN	<	0.016	<	0.016	NE	NE	NE	NE
7439-89-6	26	FE	2.100	0.800	2.100	0.800	2.100	1.011	2.100	NE
7440-48-4	27	CO	<	NR	<	NR	NE	NE	NE	NE
7440-02-0	28	NI	0.018	0.008	0.018	0.008	0.018	0.010	0.018	NE
7440-50-8	29	CU	0.073	0.030	0.073	0.030	0.073	0.038	0.073	NE
7440-66-6	30	ZN	0.350	0.130	0.350	0.130	0.350	0.165	0.350	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

nued (profile=33003)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	5.000	1.700	5.000	1.700	5.000	2.181	5.000	NE
7440-17-7	37	RB	<	NR	<	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	NE	NE
7440-22-4	47	AG	<	NR	<	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	<	NR	<	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	<	NR	<	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-97-6	80	HG	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	20.000	3.000	20.000	3.000	20.000	4.883	20.000	NE
	201	OC	43.400	6	43.400	6	43.400	NE	43.400	NE
	202	EC	18.970	6.410	18.970	6.410	18.970	8.230	18.970	NE
	203	SO4	1.300	0.400	1.300	0.400	1.300	0.521	1.300	NE
	204	NO3	0.910	0.300	0.910	0.300	0.910	0.387	0.910	NE
		SUM =	98.763		98.763		98.763		98.763	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Transportation Composite

Profile Number:33020

Profile Data Quality:D

Control Device:Uncontrolled

Reference(s):41,45,46

Data Source:Developed from Profiles 33001,33002,33003.

SCC : 110

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.69	0.77	0.82

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.020	0.064	0.020	0.064	0.020	0.076	0.020	0.064
7782-41-4	9	F	0.000	0.006	0.000	0.006	0.000	0.007	0.000	0.000
7440-23-5	11	NA	0.084	0.405	0.084	0.405	0.084	0.482	0.056	0.404
7439-95-4	12	MG	0.653	0.621	0.650	0.617	0.652	0.745	0.366	0.346
7429-90-5	13	AL	0.498	0.599	0.451	0.594	0.491	0.715	0.085	0.520
7440-21-3	14	SI	0.752	0.781	0.648	0.773	0.735	0.932	0.282	0.751
7723-14-0	15	P	0.037	0.064	0.037	0.064	0.037	0.076	0.037	0.064
7704-34-9	16	S	1.694	2.859	1.424	2.270	1.651	3.083	0.254	0.000
7782-50-5	17	CL	2.234	0.866	2.014	0.807	2.199	1.058	0.451	0.462
7440-09-7	19	K	0.109	0.117	0.109	0.117	0.109	0.140	0.085	0.115
7440-70-2	20	CA	1.511	1.023	1.308	0.655	1.479	1.050	0.704	0.404
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.109	0.222	0.003	0.059	0.092	0.193	0.003	0.012
7440-62-2	23	V	0.000	0.003	0.000	0.003	0.000	0.003	0.000	0.000
7440-47-3	24	CR	0.000	0.007	0.000	0.007	0.000	0.008	0.000	0.003
7439-96-5	25	MN	0.045	0.017	0.045	0.017	0.045	0.022	0.045	0.014
7439-89-6	26	FE	1.486	1.184	1.246	0.858	1.448	1.252	0.169	0.346
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.006	0.005	0.006	0.005	0.006	0.006	0.000	0.000
7440-50-8	29	CU	0.044	0.024	0.044	0.024	0.044	0.030	0.020	0.017
7440-66-6	30	ZN	0.169	0.102	0.233	0.184	0.179	0.181	0.023	0.046
7440-55-3	31	GA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

nued (profile=33020)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7726-95-6	35	BR	6.595	1.525	6.045	1.324	6.507	2.005	3.155	0.520
7440-17-7	37	RB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-24-6	38	SR	0.003	0.009	0.003	0.009	0.003	0.011	0.003	0.009
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-22-4	47	AG	0.001	0.005	0.001	0.005	0.001	0.006	0.001	0.005
7440-43-9	48	CD	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-36-0	51	SB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.020	0.012	0.020	0.012	0.020	0.014	0.020	0.012
7440-45-1	58	CE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-92-1	82	PB	18.027	2.104	16.627	1.921	17.805	3.777	6.760	0.000
	200	TC	18.872	24.249	18.872	24.249	18.872	29.030	18.872	24.249
	201	OC	28.840	6.375	27.273	5.961	28.592	8.732	0.000	0.000
	202	EC	15.030	6.693	19.977	9.503	15.814	10.223	0.000	0.000
	203	SO4	2.405	1.747	2.405	1.747	2.405	2.118	1.972	1.732
	204	NO3	0.303	0.173	0.303	0.173	0.303	0.212	0.000	0.000
		SUM =	99.547		99.848		99.593		33.383	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Tire Wear

Profile Number:34002

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):41,46,53

Data Source:Composite profile developed from References 41,46,and 53.

SCC : 112

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NR	NR	NR	NR	NE	NE	NR	NR
7440-42-8	5	B	NR	NR	NR	NR	NE	NE	NR	NR
7782-41-4	9	F	NR	NR	NR	NR	NE	NE	NR	NR
7440-23-5	11	NA	NR	NR	NR	NR	NE	NE	NR	NR
7439-95-4	12	MG	NR	NR	NR	NR	NE	NE	NR	NR
7429-90-5	13	AL	<	NR	<	NR	NE	NE	<	NR
7440-21-3	14	SI	<	NR	<	NR	NE	NE	<	NR
7723-14-0	15	P	<	NR	<	NR	NE	NE	<	NR
7704-34-9	16	S	<	NR	<	NR	NE	NE	<	NR
7782-50-5	17	CL	<	NR	<	NR	NE	NE	<	NR
7440-09-7	19	K	<	NR	<	NR	NE	NE	<	NR
7440-70-2	20	CA	<	NR	<	NR	NE	NE	<	NR
7440-20-2	21	SC	<	NR	<	NR	NE	NE	<	NR
7440-32-6	22	TI	<	NR	<	NR	NE	NE	<	NR
7440-62-2	23	V	<	NR	<	NR	NE	NE	<	NR
7440-47-3	24	CR	<	NR	<	NR	NE	NE	<	NR
7439-96-5	25	MN	<	NR	<	NR	NE	NE	<	NR
7439-89-6	26	FE	<	NR	<	NR	NE	NE	<	NR
7440-48-4	27	CO	<	NR	<	NR	NE	NE	<	NR
7440-02-0	28	NI	<	NR	<	NR	NE	NE	<	NR
7440-50-8	29	CU	<	NR	<	NR	NE	NE	<	NR
7440-66-6	30	ZN	1.000	NR	1.000	NR	1.000	NE	1.000	NR
7440-55-3	31	GA	<	NR	<	NR	NE	NE	<	NR
7440-56-4	32	GE	<	NR	<	NR	NE	NE	<	NR
7440-38-2	33	AS	<	NR	<	NR	NE	NE	<	NR

nued (profile=34002)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	<	NR
7726-95-6	35	BR	<	NR	<	NR	NE	NE	<	NR
7440-17-7	37	RB	<	NR	<	NR	NE	NE	<	NR
7440-24-6	38	SR	<	NR	<	NR	NE	NE	<	NR
7440-67-7	40	ZR	<	NR	<	NR	NE	NE	<	NR
7440-22-4	47	AG	<	NR	<	NR	NE	NE	<	NR
7440-43-9	48	CD	<	NR	<	NR	NE	NE	<	NR
7440-31-5	50	SN	<	NR	<	NR	NE	NE	<	NR
7440-36-0	51	SB	<	NR	<	NR	NE	NE	<	NR
7440-46-2	55	CS	<	NR	<	NR	NE	NE	<	NR
7440-39-3	56	BA	<	NR	<	NR	NE	NE	<	NR
7440-45-1	58	CE	<	NR	<	NR	NE	NE	<	NR
7439-97-6	80	HG	<	NR	<	NR	NE	NE	<	NR
7439-92-1	82	PB	<	NR	<	NR	NE	NE	<	NR
	201	OC	21.750	NR	21.750	NR	21.750	NE	21.750	NR
	202	EC	60.900	NR	60.900	NR	60.900	NE	60.900	NR
	203	SO4	NR	NR	NR	NR	NE	NE	NR	NR
	204	NO3	NR	NR	NR	NR	NE	NE	NR	NR
		SUM =	83.650		83.650		83.650		83.650	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.17 AIRCRAFT

Aircraft engines are primarily reciprocating piston and gas turbine. Aircraft emissions of concern typically occur during landing/takeoff (LTO) cycles. Each class of aircraft has its own typical LTO cycle which includes all of the normal flight and ground operation modes. These operations are divided into five modes: approach, taxi/idle in, taxi/idle out, takeoff, and climbout.

ile Name:Jet Aircraft

Profile Number:34001

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):20

Data Source:CASS Profile No. 55.

SCC : 46 47 48 20400101 20400102

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
-41-7	4	BE	NR	NE	NR	NR	NR	NE	NR	NE
7440-42-8	5	B	NR	NE	NR	NR	NR	NE	NR	NE
7782-41-4	9	F	NR	NE	NR	NR	NR	NE	NR	NE
7440-23-5	11	NA	NR	NE	NR	NR	NR	NE	NR	NE
7439-95-4	12	MG	NR	NE	NR	NR	NR	NE	NR	NE
7429-90-5	13	AL	NR	NE	NR	NR	NR	NE	NR	NE
7440-21-3	14	SI	NR	NE	NR	NR	NR	NE	NR	NE
7723-14-0	15	P	NR	NE	NR	NR	NR	NE	NR	NE
7704-34-9	16	S	NR	NE	NR	NR	NR	NE	NR	NE
7782-50-5	17	CL	NR	NE	NR	NR	NR	NE	NR	NE
7440-09-7	19	K	NR	NE	NR	NR	NR	NE	NR	NE
7440-70-2	20	CA	NR	NE	NR	NR	NR	NE	NR	NE
7440-20-2	21	SC	NR	NE	NR	NR	NR	NE	NR	NE
7440-32-6	22	TI	NR	NE	NR	NR	NR	NE	NR	NE
7440-62-2	23	V	NR	NE	NR	NR	NR	NE	NR	NE
7440-47-3	24	CR	NR	NE	NR	NR	NR	NE	NR	NE
7439-96-5	25	MN	NR	NE	NR	NR	NR	NE	NR	NE
7439-89-6	26	FE	NR	NE	NR	NR	NR	NE	NR	NE
7440-48-4	27	CO	NR	NE	NR	NR	NR	NE	NR	NE
7440-02-0	28	NI	NR	NE	NR	NR	NR	NE	NR	NE
7440-50-8	29	CU	NR	NE	NR	NR	NR	NE	NR	NE
7440-66-6	30	ZN	NR	NE	NR	NR	NR	NE	NR	NE
7440-55-3	31	GA	NR	NE	NR	NR	NR	NE	NR	NE
7440-56-4	32	GE	NR	NE	NR	NR	NR	NE	NR	NE
-38-2	33	AS	NR	NE	NR	NR	NR	NE	NR	NE

continued (profile=34001)

CAS	Species No.	Species	0-2.5 um(c)		2.5-10 um(a)		0-10 um(c)		Total Particulate Measured(c)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	NR	NE	NR	NR	NR	NE	NR	NE
7726-95-6	35	BR	NR	NE	NR	NR	NR	NE	NR	NE
7440-17-7	37	RB	NR	NE	NR	NR	NR	NE	NR	NE
7440-24-6	38	SR	NR	NE	NR	NR	NR	NE	NR	NE
7440-67-7	40	ZR	NR	NE	NR	NR	NR	NE	NR	NE
7440-22-4	47	AG	NR	NE	NR	NR	NR	NE	NR	NE
7440-43-9	48	CD	NR	NE	NR	NR	NR	NE	NR	NE
7440-31-5	50	SN	NR	NE	NR	NR	NR	NE	NR	NE
7440-36-0	51	SB	NR	NE	NR	NR	NR	NE	NR	NE
7440-46-2	55	CS	NR	NE	NR	NR	NR	NE	NR	NE
7440-39-3	56	BA	NR	NE	NR	NR	NR	NE	NR	NE
7440-45-1	58	CE	NR	NE	NR	NR	NR	NE	NR	NE
7439-97-6	80	HG	NR	NE	NR	NR	NR	NE	NR	NE
7439-92-1	82	PB	NR	NE	NR	NR	NR	NE	NR	NE
	201	OC	25.900	NE	25.900	NR	25.900	NE	25.900	NE
	202	EC	70.100	NE	70.100	NR	70.100	NE	70.100	NE
	203	SO4	NR	NE	NR	NR	NR	NE	NR	NE
	204	NO3	NR	NE	NR	NR	NR	NE	NR	NE
		SUM =	96.000		96.000		96.000		96.000	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

3.18 OTHER SOURCES

This subsection includes all the miscellaneous profiles which do not readily fit into the other source categories.

Profile Name:Residential Space Heating - Coal

Profile Number:43201

Profile Data Quality:D/E

Control Device:Uncontrolled

Reference(s):51

Data Source:Average of 2 tests. ICAP and AAS analysis of Method 5 samples. Carbon data approximated.

SCC : 2

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.07	0.14	0.20

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7440-41-7	4	BE	NA	NE	NA	NE	NA	NE	NA	NR
7440-42-8	5	B	0.120	NE	0.120	NE	0.120	NE	0.120	NR
7782-41-4	9	F	<	NE	<	NE	<	NE	<	NR
7440-23-5	11	NA	0.007	NE	0.007	NE	0.007	NE	0.007	NR
7439-95-4	12	MG	0.540	NE	0.540	NE	0.540	NE	0.540	NR
7429-90-5	13	AL	1.275	NE	1.275	NE	1.275	NE	1.275	NR
7440-21-3	14	SI	1.275	NE	1.275	NE	1.275	NE	1.275	NR
7723-14-0	15	P	0.105	NE	0.105	NE	0.105	NE	0.105	NR
7704-34-9	16	S	NR	NE	NR	NE	NR	NE	NR	NR
7782-50-5	17	CL	<	NE	<	NE	<	NE	<	NR
7440-09-7	19	K	<	NE	<	NE	<	NE	<	NR
7440-70-2	20	CA	2.100	NE	2.100	NE	2.100	NE	2.100	NR
7440-20-2	21	SC	<	NE	<	NE	<	NE	<	NR
7440-32-6	22	TI	0.075	NE	0.075	NE	0.075	NE	0.075	NR
7440-62-2	23	V	0.030	NE	0.030	NE	0.030	NE	0.030	NR
7440-47-3	24	CR	0.007	NE	0.007	NE	0.007	NE	0.007	NR
7439-96-5	25	MN	0.007	NE	0.007	NE	0.007	NE	0.007	NR
7439-89-6	26	FE	1.650	NE	1.650	NE	1.650	NE	1.650	NR
7440-48-4	27	CO	0.007	NE	0.007	NE	0.007	NE	0.007	NR
7440-02-0	28	NI	0.090	NE	0.090	NE	0.090	NE	0.090	NR
7440-50-8	29	CU	0.060	NE	0.060	NE	0.060	NE	0.060	NR
7440-66-6	30	ZN	0.300	NE	0.300	NE	0.300	NE	0.300	NR
7440-55-3	31	GA	<	NE	<	NE	<	NE	<	NR
7440-56-4	32	GE	<	NE	<	NE	<	NE	<	NR
7440-38-2	33	AS	0.030	NE	0.030	NE	0.030	NE	0.030	NR

nued (profile=43201)

CAS	Species No.	Species	0-2.5 um(c) % wt.	Unc.	2.5-10 um(c) % wt.	Unc.	0-10 um(c) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	<	NE	<	NE	<	NE	<	NR
7726-95-6	35	BR	<	NE	<	NE	<	NE	<	NR
7440-17-7	37	RB	<	NE	<	NE	<	NE	<	NR
7440-24-6	38	SR	0.030	NE	0.030	NE	0.030	NE	0.030	NR
7440-67-7	40	ZR	<	NE	<	NE	<	NE	<	NR
7440-22-4	47	AG	0.900	NE	0.900	NE	0.900	NE	0.900	NR
7440-43-9	48	CD	<	NE	<	NE	<	NE	<	NR
7440-31-5	50	SN	0.105	NE	0.105	NE	0.105	NE	0.105	NR
7440-36-0	51	SB	0.405	NE	0.405	NE	0.405	NE	0.405	NR
7440-46-2	55	CS	<	NE	<	NE	<	NE	<	NR
7440-39-3	56	BA	0.105	NE	0.105	NE	0.105	NE	0.105	NR
7440-45-1	58	CE	<	NE	<	NE	<	NE	<	NR
7439-97-6	80	HG	<	NE	<	NE	<	NE	<	NR
7439-92-1	82	PB	0.015	NE	0.015	NE	0.015	NE	0.015	NR
	201	OC	40.000	NE	40.000	NE	40.000	NE	40.000	NR
	202	EC	40.000	NE	40.000	NE	40.000	NE	40.000	NR
	203	SO4	NA	NE	NA	NE	NA	NE	NA	NR
	204	NO3	NA	NE	NA	NE	NA	NE	NA	NR
		SUM =	89.238		89.238		89.238		89.238	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Orchard Heating - Smudge Pots

Profile Number:43302

Profile Data Quality:B/D

Control Device:Not applicable

Reference(s):45

Data Source:Average of 2 samples collected with a 2-stage virtual impactor.

SCC : 63

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.23	0.44	0.62

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(c)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-41-7	4	BE	NA	NR	NA	NR	NE	NE	NE	NE
7440-42-8	5	B	NA	NR	NA	NR	NE	NE	NE	NE
7782-41-4	9	F	NA	NR	NA	NR	NE	NE	NE	NE
7440-23-5	11	NA	NA	NR	NA	NR	NE	NE	NE	NE
7439-95-4	12	MG	0.120	0.071	0.120	0.071	0.120	0.038	0.120	NE
7429-90-5	13	AL	0.035	0.020	0.035	0.020	0.035	0.011	0.035	NE
7440-21-3	14	SI	0.060	0.085	0.060	0.085	0.060	0.045	0.060	NE
7723-14-0	15	P	NA	NR	NA	NR	NE	NE	NE	NE
7704-34-9	16	S	0.890	0.100	0.890	0.100	0.890	0.084	0.890	NE
7782-50-5	17	CL	<	NR	<	NR	NE	NE	NE	NE
7440-09-7	19	K	<	NR	<	NR	NE	NE	NE	NE
7440-70-2	20	CA	<	NR	<	NR	NE	NE	NE	NE
7440-20-2	21	SC	NA	NR	NA	NR	NE	NE	NE	NE
7440-32-6	22	TI	<	NR	<	NR	NE	NE	NE	NE
7440-62-2	23	V	<	NR	<	NR	NE	NE	NE	NE
7440-47-3	24	CR	<	NR	<	NR	NE	NE	NE	NE
7439-96-5	25	MN	<	NR	<	NR	NE	NE	NE	NE
7439-89-6	26	FE	<	NR	<	NR	NE	NE	NE	NE
7440-48-4	27	CO	NA	NR	NA	NR	NE	NE	NE	NE
7440-02-0	28	NI	<	NR	<	NR	NE	NE	NE	NE
7440-50-8	29	CU	<	NR	<	NR	NE	NE	NE	NE
7440-66-6	30	ZN	0.013	NR	0.013	NR	0.013	NE	0.013	NE
7440-55-3	31	GA	<	NR	<	NR	NE	NE	NE	NE
7440-56-4	32	GE	<	NR	<	NR	NE	NE	NE	NE
7440-38-2	33	AS	<	NR	<	NR	NE	NE	NE	NE

nued (profile=43302)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(c) % wt.	Unc.
7782-49-2	34	SE	<	NR	<	NR	NE	NE	NE	NE
7726-95-6	35	BR	0.006	0.006	0.006	0.006	0.006	0.003	0.006	NE
7440-17-7	37	RB	NA	NR	NA	NR	NE	NE	NE	NE
7440-24-6	38	SR	<	NR	<	NR	NE	NE	NE	NE
7440-67-7	40	ZR	NA	NR	NA	NR	NE	NE	NE	NE
7440-22-4	47	AG	NA	NR	NA	NR	NE	NE	NE	NE
7440-43-9	48	CD	<	NR	<	NR	NE	NE	NE	NE
7440-31-5	50	SN	NA	NR	NA	NR	NE	NE	NE	NE
7440-36-0	51	SB	<	NR	<	NR	NE	NE	NE	NE
7440-46-2	55	CS	NA	NR	NA	NR	NE	NE	NE	NE
7440-39-3	56	BA	<	NR	<	NR	NE	NE	NE	NE
7440-45-1	58	CE	<	NR	<	NR	NE	NE	NE	NE
7439-92-1	82	PB	0.059	0.044	0.059	0.044	0.059	0.023	0.059	NE
	201	OC	7.200	3.960	7.200	3.960	7.200	2.145	7.200	NE
	202	EC	83.500	9.000	83.500	9.000	83.500	7.789	83.500	NE
	203	SO4	1.800	1.131	1.800	1.131	1.800	0.608	1.800	NE
	204	NO3	NA	NR	NA	NR	NE	NE	NE	NE
	205	NH4	1.730	0.665	1.730	0.665	1.730	0.372	1.730	NE
		SUM =	95.413		95.413		95.413		95.413	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

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APPENDIX A

PM PROFILE LISTING

TABLE A-1. PROFILE LISTING

Profile Number	Profile Name	Page Number
11201	Coal-Fired Power Plant	24
11501	Oil-Fired Power Plant	26
11801	Wood-Fired Boiler	28
12201	Coal-Slurry Fired Boiler	30
12704	Wood-Fired Boiler	33
13501	Residual Oil Combustion	35
17105	Municipal Incinerator (Philadelphia)	180
17106	Municipal Incinerator Composite	182
17120	Sewage Sludge Incineration - Composite	184
17121	Sewage Sludge Incineration	186
17122	Sewage Sludge Incineration	188
17123	Sewage Sludge Incineration	190
17124	Sewage Sludge Incineration	192
19101	Scrap Copper Incinerator	109
20101	Aluminum Foundry - Reverberatory Furnace	111
20102	Secondary Aluminum Plant - Dross Recovery Furnace	113
20401	Secondary Lead Smelter - Blast Furnace	115
20501	Zinc Oxide Kiln	117
20502	Antimony Oxide Plant - Antimony Roasting	119
21101	Limestone Dust	132
21102	Primary Lead Smelting - Ore Concentrate	52

TABLE A-1. PROFILE LISTING (Continued)

Profile Number	Profile Name	Page Number
21103	Primary Lead Smelting - Ore Concentrate Composite	54
21150	Primary Lead Smelting - Materials Handling Composite	56
21203	Coke Dust	134
21204	Coal Dust	136
21205	Primary Lead Smelting - Speiss Fugitive Dust	58
21206	Primary Lead Smelting - Soda Flux Fugitive Dust	60
21301	Copper Ore Crushing	62
21302	Copper Ore Mill Wastepile	64
21303	Copper Ore Concentrate	66
21304	Copper Mining Waste	68
21320	Copper Ore Processing Composite	70
21340	Composite of Copper Ore Concentrate and Mining Waste	72
21401	Feed and Grain Handling Dust	49
21501	Primary Lead Smelting - Slag Dust	74
22101	Particleboard Dryer	160
22102	Particleboard Dryer	162
22201	Wood Products - Sanderdust	164
22202	Sawdust	166
22301	Veneer Dryer	168
23103	Kraft Recovery Furnace	170
23202	Lime Kiln	172
24101	Sulfite Recovery Boiler	174

TABLE A-1. PROFILE LISTING (Continued)

Profile Number	Profile Name	Page Number
25201	Calcium Carbide Furnace	138
25302	Charcoal Manufacturing	40
25401	Silica Manufacturing	140
25402	Asphalt Roofing Manufacturing	142
25403	Paint Spray Booth	177
25404	Urea Fertilizer Production	42
25405	Boric Acid Manufacturing	44
25406	Carborundum Manufacturing	144
25407	Phosphorous Plant Plume	46
26101	Refinery Process Heaters (Gas)	155
26202	Petroleum Refinery Catalytic Cracker	157
27102	Glass Furnace	146
27201	Cement Kiln (Gas-Fired)	148
27203	Cement Kiln (Coal-Fired)	150
27501	Gypsum Calciner	152
28201	Cast Iron Induction Furnace	121
28202	Cast Iron Cupola	123
28301	Steel Production - Steel Sinter Plant	76
28302	Steel Production - Open Hearth Furnace	78
28303	Steel Production - Basic Oxygen Furnace	80
28304	Steel Electric Arc Furnace	125
28401	Ferromanganese Furnace	82

TABLE A-1. PROFILE LISTING (Continued)

Profile Number	Profile Name	Page Number
28601	Steel Foundry - Steel Heat Treating (Salt Quench)	127
29101	Aluminum Processing	84
29102	Aluminum Reduction Potline	86
29202	Primary Copper Smelter	88
29203	Copper Oxide Kiln	129
29301	Primary Lead Smelting - Slag Pouring	90
29302	Primary Lead Smelting - Blast Furnace	92
29303	Primary Lead Smelting - Zinc Fuming	94
29304	Primary Lead Smelting - Sintering	96
29305	Primary Lead Smelting - Blast Furnace Upset	98
29306	Primary Lead Smelting - Zinc Baghouse	100
29307	Primary Lead Smelting - Dross Reverberatory Furnace	102
29309	Primary Lead Smelting - Sinter Production	104
29330	Primary Lead Smelting - Composite	106
31101	Light-Duty Vehicles - Leaded	296
31102	Heavy-Duty Vehicles - Leaded	298
31201	Light-Duty Vehicles - Unleaded	300
31230	Light-Duty Vehicles - Composite	302
32101	Light-Duty Vehicles - Diesel	304
32202	Heavy-Duty Diesel	306
33001	Leaded/Unleaded Gasoline Composite - 1977	308

TABLE A-1. PROFILE LISTING (Continued)

Profile Number	Profile Name	Page Number
33002	Transportation Composite - Medford, Oregon (1980)	310
33003	Transportation Composite - Portland, Oregon (1979)	312
33020	Transportation Composite	314
34001	Jet Aircraft	319
34002	Tire Wear	316
41101	Paved Road Dust - Missoula, Montana	204
41102	Paved Road Dust - Juneau, Alaska	206
41103	Paved Road Dust - Lewiston, Idaho	208
41104	Paved Road Dust - Butte, Montana	210
41105	Paved Road Dust - East Helena, Montana	212
41106	Paved Road Dust - Medford, Oregon	214
41107	Paved Road Dust - Portland, Oregon	216
41109	Paved Road Dust - Alabama	218
41110	Paved Road Dust - Spokane, Washington	220
41130	Paved Road Dust - Composite	222
41201	Unpaved Road Dust (Copper Mine)	195
41203	Unpaved Road Dust - Haul Road	197
41204	Unpaved Road Dust - East Helena, Montana	199
41220	Unpaved Road Dust Composite	201
41301	Soil Dust - Des Moines, Iowa	227
41302	Soil Dust - Seattle, Washington	229

TABLE A-1. PROFILE LISTING (Continued)

Profile Number	Profile Name	Page Number
41303	Soil Dust - Visalia, California	231
41304	Soil Dust - South Bend, Indiana	233
41305	Soil Dust - Houston, Texas	235
41306	Soil Dust - East Helena, Montana	237
41307	Soil Dust - Idaho	239
41308	Soil Dust - Creston, Iowa	241
41309	Soil Dust - Council Bluffs, Iowa	243
41310	Soil Dust - Sioux City, Iowa	245
41311	Soil Dust - Cedar Rapids, Iowa	247
41312	Soil Dust - Davenport, Iowa	249
41313	Soil Dust - Spokane, Washington	251
41314	Soil Dust - Boise, Idaho	253
41315	Soil Dust - Bakersfield, California	255
41316	Soil Dust - Pasedena, California	257
41318	Soil Dust - Medford, Oregon	259
41319	Soil Dust - Portland, Oregon	261
41320	Soil Dust - Alabama	263
41350	Soil Dust - Composite	265
41401	Road Sand and Salt Mix	224
42101	Woodstoves - Pine Fuel	272
42102	Woodstoves - Average, All Fuels	274

TABLE A-1. PROFILE LISTING (Continued)

Profile Number	Profile Name	Page Number
42103	Woodstoves - Oak Fuel	276
42201	Fireplaces - Softwoods	278
42202	Fireplaces - Hardwoods	280
42301	Slash Burning	287
42302	Slash Burning	289
42303	Residential Wood Combustion - Composite	282
42304	Agricultural Field Burning	291
42320	Agricultural Field Burning Composite	293
42330	Composite of Residential Wood Burning Sources	284
43101	Marine Aerosol	267
43201	Residential Space Heating - Coal	322
43301	Volcanic Ash	269
43302	Orchard Heating - Smudge Pots	324
43303	Coal-Fired Power Plant Flyash	37

APPENDIX B
PM PROFILE CALCULATIONS

This appendix provides details of the procedures used for calculating composition data for the 0-10 um size interval and uncertainty associated with composition data for the 0-10 um size range. The calculational procedures are based on the methodologies outlined in the Receptor Model Source Composition Library. This appendix also discusses the assumptions used in filling profile data gaps. In the following calculations, values for the following entries in the profiles were set to zero: NA (not analyzed), NR (not reported), and < (less than detection limit). The calculations discussed in this appendix involve combining composition data reported in the Source Composition Library with size distribution data compiled primarily from AP-42. An additional uncertainty is introduced into the calculations since the composition data and size distribution data were developed for different sources.

In addition to procedures for calculating composition data for the 0-10 um, a methodology that can be used to estimate composition data for the 2.5-6 um and 6-10 um size intervals is also presented in this appendix. However, as discussed below, the application of this methodology is limited.

B.1 CALCULATION OF COMPOSITION DATA FOR PM_{10} (0-10 um)

According to the Source Composition Library, page II-34, PM_{10} composition is calculated as:

$$A_{iJ,0-10} = (F_{2.5J}/F_{10J})\, A_{iJ,0-2.5} + [1 - (F_{2.5J}/F_{10J})]\, A_{iJ,2.5-10} \quad (1)$$

Where:

$A_{iJ,0-10}$ = PM_{10} composition data (weight percent) for species i in emissions from source J

$F_{2.5J}$ = fraction of mass in the 0-2.5 um size interval in source J emissions

F_{10J} = fraction of mass in the 0-10 um size interval in source J emissions

$A_{iJ,0-2.5}$ = composition data (weight percent) for fine fraction (<2.5 um) for species i in emissions from source J

$A_{iJ,2.5-10}$ = composition data (weight percent) for coarse fraction (2.5-10 um) for species i in source J

This equation is derived from the following basic relationship:

$$NEM_{iJ,0-10} = NEM_{iJ,0-2.5} + NEM_{iJ,2.5-10} \qquad (2)$$

where NEM is defined as the normalized elemental mass (mass fraction x weight percent). For example,

$$NEM_{iJ,0-10} = F_{10J} \times A_{iJ,0-10} \qquad (3)$$

As shown schematically in Figure 1, a plot of NEM versus particle size would lead to a curve increasing with particle size. Equation (1) is illustrated below for Profile 17105:

Let:

J = Municipal Incinerator (MI) - Profile 17105

i = Al (aluminum)

$F_{2.5,MI}$ = 0.26 (see Profile 17105)

$F_{10,MI}$ = 0.38 (see Profile 17105)

$A_{Al,MI,0-2.5}$ = 0.819 (see Profile 17105)

$A_{Al,MI,2.5-10}$ = 5.827 (see Profile 17105)

Then:

$$A_{Al,MI,0-10} = (0.26/0.38)\ (0.819) + [1 - (0.26/0.38)]\ 5.827$$

$$A_{Al,MI,0-10} = 0.560 + 1.840 = 2.400 \text{ percent}$$

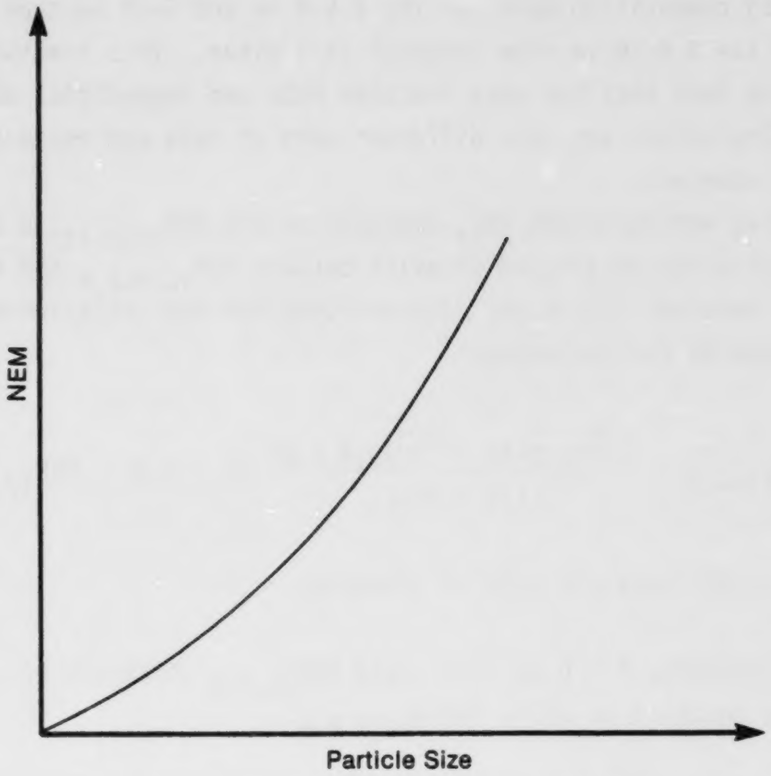

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Figure 1. Normalized Elemental Size versus Particle Size

B.2 CALCULATION OF COMPOSITION DATA FOR THE 2.5-6 um AND 6-10 um INTERVALS

As indicated above, the application of the following methodology for estimating composition data for the 2.5-6 um and 6-10 um size intervals from data for the 2.5-10 um size interval is limited. This limitation is largely due to the fact that the mass fraction data and composition data used in these calculations are from different sets of data and represent different emission sources.

Having estimated the PM_{10} composition and $NEM_{iJ,0-10}$, a simple linear relationship can be assumed to exist between $NEM_{iJ,0-2.5}$ and $NEM_{iJ,0-10}$ over the size interval 2.5-10 um. The equation for this relationship can be represented by the following:

$$NEM_{iJ,0-X} = \frac{(NEM_{iJ,0-10} - NEM_{iJ,0-2.5})}{(10 - 2.5)} (X - 2.5) + NEM_{iJ,0-2.5} \qquad (4)$$

Where X is the particle size of interest.

Substituting X = 6 um will yield $NEM_{iJ,0-6}$ which can be used in the following equation to solve for $A_{iJ,2.5-6}$.

$$NEM_{iJ,0-6} = NEM_{iJ,0-2.5} + NEM_{iJ,2.5-6} \qquad (5)$$

Similarly, the value for $A_{iJ,6-10}$ can be estimated from Equation (6):

$$NEM_{iJ,0-10} = NEM_{iJ,0-6} + NEM_{iJ,6-10} \qquad (6)$$

Using the same example data set,

$$NEM_{Al,MI,0-6} = \frac{(NEM_{Al,MI,0-10} - NEM_{Al,MI,0-2.5})}{(10 - 2.5)} (6 - 2.5) + NEM_{Al,MI,0-2.5}$$

$$= \frac{[(0.38 \times 2.400) - (0.26 \times 0.819)]}{7.5} (3.5) + (0.26 \times 0.819)$$

$$NEM_{Al,MI,0-6} = 0.326 + 0.213 = 0.539$$

From Equation (5),

$$NEM_{Al,MI,0-6} = NEM_{Al,MI,0-2.5} + NEM_{Al,Mi,2.5-6}$$

$$0.539 = (0.26 \times 0.819) + (F_{2.5-6,MI} \times A_{Al,MI,2.5-6})$$

$$F_{2.5-6,MI} = F_{6,MI} - F_{2.5,MI}$$

$$F_{6,MI} = 0.31 \text{ (see Profile 17105)}$$

$$F_{2.5,MI} = 0.26 \text{ (see Profile 17105)}$$

$$F_{2.5-6,MI} = 0.05$$

Therefore,

$$A_{Al,MI,2.5-6} = (0.539 - 0.213) / 0.05 = 6.521 \text{ percent}$$

Using Equation (6),

$$NEM_{Al,MI,0-10} = NEM_{Al,MI,0-6} + NEM_{Al,MI,6-10}$$

$$(0.38 \times 2.400) = 0.539 + F_{6-10,MI} \times A_{Al,MI,6-10}$$

$$F_{6-10,MI} = F_{10,MI} - F_{6,MI}$$

$$F_{6-10,MI} = 0.38 - 0.31 = 0.07$$

$$A_{Al,MI,6-10} = (0.912 - 0.539) / 0.07 = 5.329 \text{ percent}$$

B.3 CALCULATION OF UNCERTAINTY ASSOCIATED WITH COMPOSITION DATA FOR PM_{10}

According to the Receptor Model Source Composition Library, page II-35, the uncertainty of the PM_{10} composition data can be calculated by propagation of errors in quadrature as follows:

$$\begin{aligned}\sigma_{iJ,10} = [&(A_{iJ,0-2.5} / F_{10J})^2 \sigma^2_{F2.5J} + (F_{2.5J} / F^2_{10J})^2 A^2_{iJ,0-2.5} \sigma^2_{F10J} \\ &+ (F_{2.5J} / F_{10J})^2 \sigma^2_{AiJ,0-2.5} + (A_{iJ,2.5-10} / F_{10J}) \sigma^2_{F2.5J} \\ &+ (F_{2.5J} / F^2_{10J})^2 A^2_{iJ,2.5-10} \sigma^2_{F10J} \\ &+ (F_{2.5J} / F_{10J}) \sigma^2_{AiJ,2.5-10}]^{1/2} \qquad (7)\end{aligned}$$

Where $\sigma^2_{F2.5J}$ and σ^2_{F10J} denote the variances associated with mass fraction data for the 0-2.5 um and 0-10 um size intervals and $\sigma^2_{AiJ,0-2.5}$ and $\sigma^2_{AiJ,2.5-10}$ represent the variances associated with the composition data for the fine and coarse size fractions. This equation is illustrated below for Profile 42302:

Let:

J = Slash burning (SB) - Profile 42302

i = K (potassium)

$F_{2.5,SB}$ = 0.90 (see Profile 42302)

$F_{10,SB}$ = 0.99 (see Profile 42302)

$A_{K,SB,0-2.5}$ = 0.620 (see Profile 42302)

$A_{K,SB,2.5-10}$ = 1.250 (see Profile 42302)

$_{K,SB,0-2.5}$ = 0.235 (see Profile 42302)

$_{K,SB,2.5-10}$ = 0.212 (see Profile 42302)

Since $\sigma_{F2.5,SB}$ and $\sigma_{F10,SB}$ are not available, assume the following:

$\sigma_{F2.5,SB} = 0.1\ F_{2.5,SB} = 0.090$

$\sigma_{F10,SB} = 0.1\ F_{10,SB} = 0.099$

Then:

$$
\begin{aligned}
\sigma_{K,SB,10} &= [(0.62/0.99)^2\ (0.09)^2 + (0.90/0.99^2)^2\ (0.62)^2\ (0.099)^2 \\
&\quad + (0.90/0.99)^2\ (0.235)^2 + (1.250/0.99)\ (0.009)^2 \\
&\quad + (0.90/0.99^2)^2\ (1.250)^2\ (0.099)^2 + (0.90/0.99)\ (0.212)^2]^{1/2} \\
&= [0.0032 + 0.0032 + 0.0456 + 0.0102 + 0.0129 + 0.0409]^{1/2} \\
&= (0.11599)^{1/2} = 0.341
\end{aligned}
$$

B.4 ASSUMPTIONS USED IN FILLING DATA GAPS

In several profiles from the Source Composition Library, composition data information for one or two size intervals were not reported. To increase the usefulness of the profiles, certain assumptions were employed to fill these data gaps.

- If data are reported for a single size interval, assume data for the other two intervals are the same. Values for the 0-10 um size interval are also assumed to be the same.
- If data for the 0-2.5 um size interval are missing, assume the data for the 2.5-10 um size interval can be substituted and vice versa. Values for the 0-10 um size interval are also assumed to be the same.
- If data for the total particulate measured are not reported, assume the estimated data for the 0-10 um size fraction can be substituted.

These assumptions are indicated on each profile with appropriate footnotes.

B.5 DEVELOPMENT OF COMPOSITE AND INDUSTRY-SPECIFIC AVERAGE PROFILES

In developing composite profiles, the average composition and uncertainty data were calculated from the individual profiles for the following intervals: 0-2.5 um, 2.5-10 um, and total particulate measured. The uncertainty values were averaged for a given size interval and a given species using the following equation:

$$\sigma_{\text{average}} = [\overset{n}{\underset{k=1}{\sigma}}\ {}_{k}^{2} / n]^{1/2} \qquad (8)$$

Where:

σ_{average} = average uncertainty associated with a particular species in a particular size range in the composite profile

σ_k = uncertainty associated with a particular species in a particular size range in profile k

n = number of profiles composited.

Calculations involving composition data for the 0-10 um fraction and uncertainty information for the 0-10 um fraction were then completed for the composite profile.

In developing the industry-specific average profiles, the procedure described above for the composite profiles was employed.

APPENDIX C

PARTICLE SIZE DISTRIBUTION DATA

This appendix discusses how the particle size distribution data (i.e., fraction of mass in a given size interval) presented in the PM profiles in Section 3.0 are compiled. The mass fraction data can be coupled with the size-specific composition data in a given profile to estimate size-specific and speciated particulate emissions.

A large proportion of the particle size distribution data are obtained from Supplement A of AP-42. For about 45 percent of the PM profiles in the Source Composition Library, mass fraction data were extracted from this document. For several profiles, only generic particle size distribution data were identified in Supplement A of AP-42.

Data from other sources were used to characterize those profiles for which mass fraction data did not exist in Supplement A of AP-42. Table C-1 presents a listing of profiles where the information source for the mass fraction data is specified and a data quality indicator is included. The quality indicators are primarily based on the ratings used in Supplement A of AP-42 for cumulative size-specific emission factors. The ratings designated for the size-specific emission factors are assumed to represent the quality associated with the particle size distribution data.

Data based on generic size distributions in AP-42 are assigned a rating of "D" whereas the default value is assigned a rating of "E." The default value represents the overall average of the size distribution data based on all the profiles. It is used for profiles where no size distribution data were identified. In cases where engineering judgement was employed in applying size distribution data for a specific profile to a profile representing a similar source category, the rating scheme is modified to reflect this assumption.

Calculation of mass fraction data from the information contained in AP-42 is illustrated below for Profile 28301 - Steel Production - Steel Sinter Plant (control device: baghouse). On page 7.5-11 from AP-42, TABLE C-1.

Profile Number	Mass Fraction Data Quality	Information Source
11201	D	AP-42 (Reference 1)
11501	C	AP-42 (Reference 1)
11801	E	AP-42 (Reference 1)
12201	C	Based on data from Reference 7
12704	E	AP-42 (Reference 1)
13501	D	AP-42 (Reference 1)
17105	D	AP-42 (Reference 1)
17106	E	Based on data from Profile 17105
17120	C	Average of data from Profiles 17121 and 17124
17121	C	Based on data from Reference 5
17122	C	Average of data from Profiles 17121 and 17124
17123	C	Average of data from Profiles 17121 and 17124
17124	C	Based on data from Reference 5
19101	E	Based on data from Profile 17105
20101	D	AP-42 (Reference 1)
20102	D	AP-42 - generic size distribution (Reference 1)
20401	D	AP-42 (Reference 1)
20501	D	AP-42 - generic size distribution (Reference 1)

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
20502	D	AP-42 - generic size distribution (Reference 1)
21101	D	AP-42 - generic size distribution (Reference 1)
21102	D	AP-42 - generic size distribution (Reference 1)
21103	D	AP-42 (Reference 1)
21150	D	Average data based on Profiles 21102, 21103, and 21206
21203	D	AP-42 - generic size distribution (Reference 1)
21204	D	AP-42 - generic size distribution (Reference 1)
21205	E	Based on data from Profile 21103
21206	E	Based on data from Profile 21103
21301	D	AP-42 - generic size distribution (Reference 1)
21302	D	AP-42 - generic size distribution (Reference 1)
21303	D	AP-42 - generic size distribution (Reference 1)
21304	D	AP-42 - generic size distribution (Reference 1)
21320	D	Average data for Profiles 21301 and 21302
21340	D	Average data for Profiles 21303 and 21304
21401	D	AP-42 (Reference 1)

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
21501	D	AP-42 - generic size distribution (Reference 1)
22101	E	Default value
22102	E	Default value
22201	E	AP-42 (Reference 1)
22202	E	Default value
22301	D	AP-42 - generic size distribution (Reference 1)
23103	C	AP-42 (Reference 1)
23202	C	AP-42 (Reference 1)
24101	C	AP-42 (Reference 1)
25201	D	AP-42 - generic size distribution (Reference 1)
25302	D	AP-42 - generic size distribution (Reference 1)
25401	E	Default value
25402	D	AP-42 (Reference 1)
25403	D	AP-42 (Reference 1)
25404	D	AP-42 - generic size distribution (Reference 1)
25405	E	AP-42 (Reference 1)
25406	E	Default value
25407	D	AP-42 - generic size distribution (Reference 1)

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
26101	D	AP-42 - generic size distribution (Reference 1)
26202	E	Default value
27102	E	AP-42 (Reference 1)
27201	D	AP-42 (Reference 1)
27203	D	AP-42 (Reference 1)
27501	D	AP-42 - generic size distribution (Reference 1)
28201	D	AP-42 - generic size distribution (Reference 1)
28202	C	AP-42 (Reference 1)
28301	C	AP-42 (Reference 1)
28302	E	AP-42 (Reference 1)
28303	D	AP-42 (Reference 1)
28304	E	AP-42 (Reference 1)
28401	B	AP-42 (Reference 1)
28601	D	AP-42 - generic size distribution (Reference 1)
29101	E	AP-42 (Reference 1)
29102	D	AP-42 (Reference 1)
29202	D	AP-42 (Reference 1)
29203	D	AP-42 - generic size distribution (Reference 1)
29301	E	Average data from Profiles 29304, 29306, 29307, and 29309

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
29302	C	AP-42 (Reference 1)
29303	D	Based on data for Profile 29302
29304	D	AP-42 - generic size distribution (Reference 1)
29305	D	Based on data from Profile 29302
29306	D	AP-42 - generic size distribution (Reference 1)
29307	D	AP-42 (Reference 1)
29309	D	AP-42 (Reference 1)
29330	E	Average data for Profiles 29303 and 29306
31101	C	AP-42 (Reference 6)
31102	C	AP-42 (Reference 6)
31201	C	AP-42 (Reference 6)
31230	D	Average data from Profiles 31101 and 31201
32101	C	AP-42 (Reference 6)
32202	C	AP-42 (Reference 6)
33001	C	AP-42 (Reference 6)
33002	D	Average data from Profiles 31102, 31201, and 32101
33003	D	Based on data for Profile 33001
33020	D	Average data from Profiles 33001, 33002, and 33003

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
34001	E	Default value
34002	E	Default value
41101	D	Extrapolated from data (page 41 of Reference 2)
41102	D	Extrapolated from data (page 41 of Reference 2)
41103	D	Extrapolated from data (page 41 of Reference 2)
41104	D	Extrapolated from data (page 41 of Reference 2)
41105	D	Extrapolated from data (page 41 of Reference 2)
41106	D	Extrapolated from data (page 41 of Reference 2)
41107	D	Extrapolated from data (page 41 of Reference 2)
41109	D	Extrapolated from data (page 41 of Reference 2)
41110	D	Extrapolated from data (page 41 of Reference 2)
41130	D	Extrapolated from data (page 41 of Reference 2)
41201	D	Extrapolated from data (page 41 of Reference 2)
41203	D	Extrapolated from data (page 41 of Reference 2)
41204	D	Extrapolated from data (page 41 of Reference 2)

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
41220	D	Extrapolated from data (page 41 of Reference 2)
41301	D	Extrapolated from data (page 28 of Reference 3)
41302	D	Extrapolated from data (page 28 of Reference 3)
41303	D	Extrapolated from data (page 28 of Reference 3)
41304	D	Extrapolated from data (page 28 of Reference 3)
41305	D	Extrapolated from data (page 28 of Reference 3)
41306	D	Extrapolated from data (page 28 of Reference 3)
41307	D	Extrapolated from data (page 28 of Reference 3)
41308	D	Extrapolated from data (page 28 of Reference 3)
41309	D	Extrapolated from data (page 28 of Reference 3)
41310	D	Extrapolated from data (page 28 of Reference 3)
41311	D	Extrapolated from data (page 28 of Reference 3)
41312	D	Extrapolated from data (page 28 of Reference 3)
41313	D	Extrapolated from data (page 28 of Reference 3)

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
41314	D	Extrapolated from data (page 28 of Reference 3)
41315	D	Extrapolated from data (page 28 of Reference 3)
41316	D	Extrapolated from data (page 28 of Reference 3)
41318	D	Extrapolated from data (page 28 of Reference 3)
41319	D	Extrapolated from data (page 28 of Reference 3)
41320	D	Extrapolated from data (page 28 of Reference 3)
41350	D	Extrapolated from data (page 28 of Reference 3)
41401	D	Extrapolated from data (page 41 of Reference 2)
42101	E	Based on data from Profile 12704
42102	E	Based on data from Profile 12704
42103	E	Based on data from Profile 12704
42201	E	Based on data from Profile 12704
42202	E	Based on data from Profile 12704
42301	D	Extrapolated from data (page 28 of Reference 3)
42302	D	Extrapolated from data (page 28 of Reference 3)
42303	E	Based on data from Profile 12704

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
42304	D	Extrapolated from data (page 28 of Reference 3)
42320	D	Average data from Profiles 42301, 42302, and 42304
42330	E	Average data from Profiles 42102, 42201, 42202, and 42303
43101	D	Extrapolated from data (page 48 of Reference 3)
43201	D	Based on AP-42, page 1.1-11
43301	E	Default value
43302	E	Based on data from Profile 13501
43303	C	Based on data from Reference 4
90001	E	Default value
90002	E	Default value
90003	E	Default value
90004	E	Default value
90005	E	Default value
90006	E	Default value
90007	E	Default value
90008	E	Default value
90009	E	Default value
90010	E	Default value
90011	E	Default value

TABLE C-1. (Continued)

Profile Number	Mass Fraction Data Quality	Information Source
90012	E	Default value
90013	E	Default value
90014	E	Default value
90015	E	Default value
90016	E	Default value
00000	E	Default value

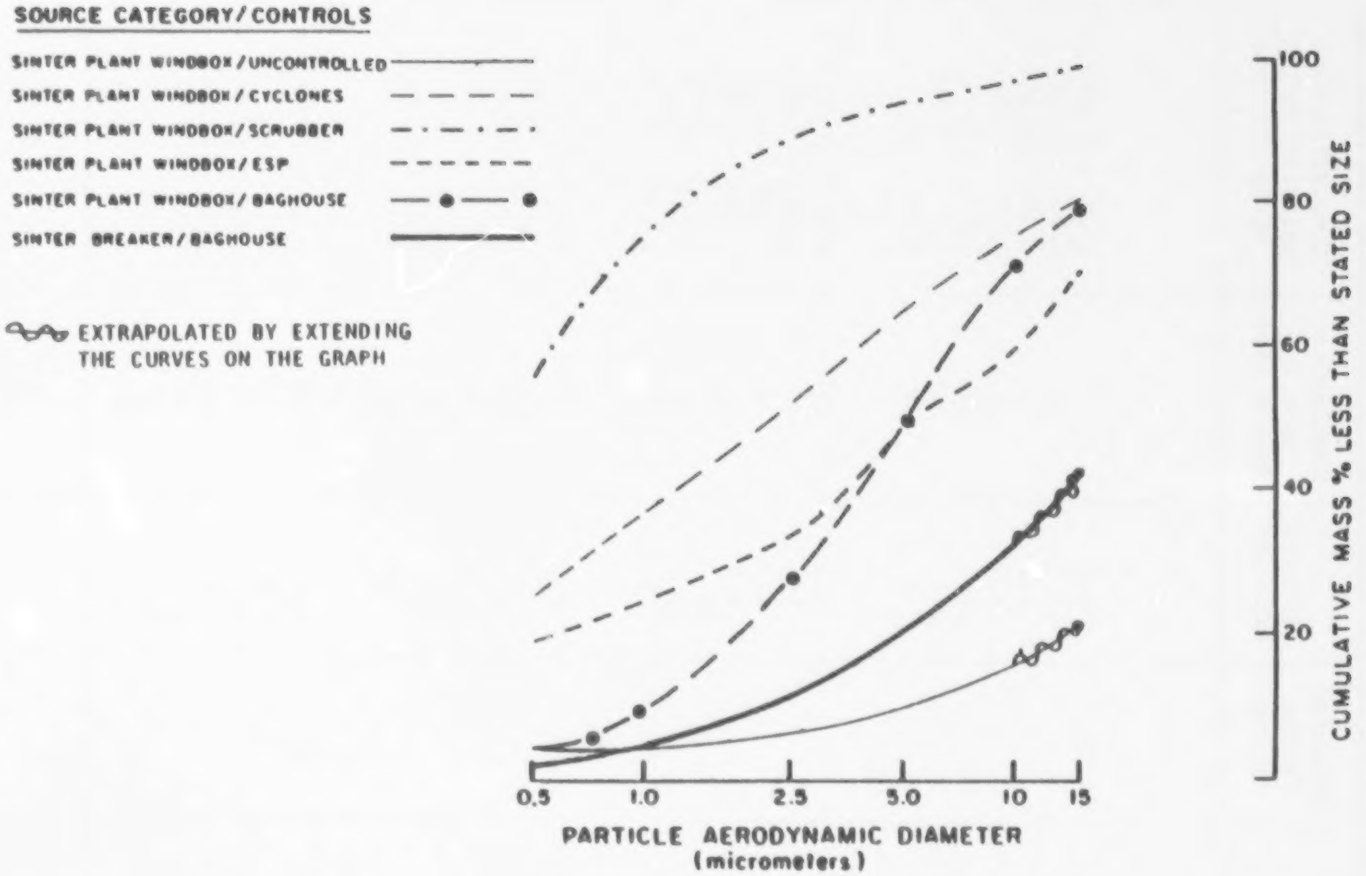
particle size distribution data are reported for sintering operations controlled by baghouse as shown in Table 7.5-2 of AP-42. .

Figure 7.5-2 of AP-42 presents the same information graphically. Since the 0-6 um size range is not shown in the table, the value for this range can be obtained from the figure as 0.60. Thus, the mass fraction data required for calculations in this document data can be summarized as follows:

Particle Size	Cumulative Mass Fraction
0-2.5 um	0.27
0-6 um	0.60
0-10 um	0.69

TABLE 7.5-2. SIZE SPECIFIC EMISSION FACTORS

Source	Emission Factor Rating	Particle Size μm^a	Cumulative Mass % ≤ Stated size	Cumulative mass emission factor kg/Mg	(lb/ton)
Sintering Windbox Uncontrolled Leaving grate	D	0.5	4^b	0.22	(0.44)
		1.0	4	0.22	(0.44)
		2.5	5	0.28	(0.56)
		5.0	9	0.50	(1.00)
		10	15	0.83	(1.67)
		15	20^c	1.11	(2.22)
		d	100	5.56	(11.1)
Controlled by wet ESP	C	0.5	18^b	0.015	(0.03)
		1.0	25	0.021	(0.04)
		2.5	33	0.028	(0.06)
		5.0	48	0.041	(0.08)
		10	59^b	0.050	(0.10)
		15	69	0.059	(0.12)
		d	100	0.085	(0.17)
Controlled by venturi scrubber	C	0.5	55	0.129	(0.26)
		1.0	75	0.176	(0.35)
		2.5	89	0.209	(0.42)
		5.0	93	0.219	(0.44)
		10	96	0.226	(0.45)
		15	98	0.230	(0.46)
		d	100	0.235	(0.47)
Controlled by cyclone^e	C	0.5	25^c	0.13	(0.25)
		1.0	37^b	0.19	(0.37)
		2.5	52	0.26	(0.52)
		5.0	64	0.32	(0.64)
		10	74	0.37	(0.74)
		15	80	0.40	(0.80)
		d	100	0.5	(1.0)
Controlled by baghouse	C	0.5	3.0	0.005	(0.009)
		1.0	9.0	0.014	(0.027)
		2.5	27.0	0.041	(0.081)
		5.0	47.0	0.071	(0.141)
		10.0	69.0	0.104	(0.207)
		15.0	79.0	0.119	(0.237)
		d	100.0	0.15	(0.3)



(Calculated according to the Task Group Lung Dynamics definition of Aerodynamic Diameter)

Figure 7.5-2. Particle size distribution of sinter plant emissions.

APPENDIX C REFERENCES

1. AP-42 (GPO 055-000-00251-7), Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Fourth Edition, U. S. Environmental Protection Agency, Research Triangle Park, NC, September 1985.

2. Anthropogenic Sources and Emissions of Alkaline Particulate Matter in Canada (Prepared by Meteorological and Environmental Planning, Ltd. and Ontario Research Foundation for Air Pollution Control Directorate), 1984.

3. National Inventory of Natural Sources and Emissions of Alkaline Particulates (Prepared by the Environmental Applications Group, Ltd. for Environment Canada), 1982.

4. Davison, R. L. et al., Trace Elements in Fly Ash, Dependence of Concentration on Particle Size, Environmental Science and Technology, 8(13), pp. 1107-1112, December 1974.

5. Bennett, R. L. and K. T. Knapp, Characterization of Particulate Emissions from Municipal Wastewater Sludge Incinerators, Environmental Science and Technology, 16(12), pp. 831-836, 1982.

6. AP-42 (GPO 055-000-00252-5), Compilation of Air Pollutant Emission Factors, Volume II, Mobile Sources, Fourth Edition, U. S. Environmental Protection Agency, Research Triangle Park, NC, September 1985 (Appendix L).

7. DeRosier, R. and L. R. Waterland, Environmental Assessment of a Watertube Boiler Firing a Coal-Water Slurry, Volume I, Technical Results, U. S. Environmental Protection Agency, Publication No. EPA-600/7-86-004a (NTIS No. PB86-159845), February 1986.

APPENDIX D

INDUSTRY-SPECIFIC AVERAGE PROFILES AND "ZERO" PROFILE

For several source categories, it was not possible to make profile assignments based on engineering judgement using the available profiles. In these cases, industry-specific average profiles were developed from original profiles representing SCC's within the general industry group. Sixteen such profiles with profile numbers beginning with 9 were developed as listed below:

Profile Number	Profile Name
90001	Solid Waste - Average
90002	Chemical Manufacturing - Average
90003	Food and Agriculture - Average
90004	Steel Production - Average
90005	Lead Smelters - Average
90006	Metal Mining - General Processes - Average
90007	Primary Metal Production - Average
90008	Secondary Metal Production - Average
90009	Secondary Aluminum - Average
90010	Gray Iron Foundries - Average
90011	Steel Foundry - General
90012	Clay and Fly Ash Sintering - Average
90013	Mineral Products - Average
90014	Petroleum Industry - Average
90015	Pulp and Paper Industry
90016	Industrial Manufacturing - Average

These profiles are presented in this appendix. All of these profiles are assigned a data quality level of "E" and are recommended for use only if there is no other information available.

Another profile developed in this study using engineering judgement is Profile 00000; it is an overall average of the profiles in the PM data base. Its main function is to provide a default value for categories where no emissions are expected. If particulate emissions are reported for such categories, then Profile 00000 can be used to speciate these emissions if no other information exists.

le Name:Solid Waste - Average

Profile Number:90001

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 5xxxxxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.25	0.31	0.40

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	4.775	0.000	4.775	0.000	4.775	0.924	4.775	1.273
7439-95-4	12	MG	0.710	0.000	0.710	0.000	0.710	0.137	0.710	0.813
7429-90-5	13	AL	0.585	0.000	0.585	0.000	0.585	0.113	0.585	0.417
7440-21-3	14	SI	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7704-34-9	16	S	2.150	0.000	2.150	0.000	2.150	0.416	2.150	5.303
7782-50-5	17	CL	11.150	0.000	11.150	0.000	11.150	2.158	11.150	3.041
7440-09-7	19	K	2.500	0.000	2.500	0.000	2.500	0.484	2.500	7.071
7440-70-2	20	CA	0.384	0.000	0.384	0.000	0.384	0.074	0.384	0.940
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.097	0.000	0.097	0.000	0.097	0.019	0.097	0.090
7440-62-2	23	V	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.001
7440-47-3	24	CR	0.018	0.000	0.018	0.000	0.018	0.003	0.018	0.016
7439-96-5	25	MN	0.042	0.000	0.042	0.000	0.042	0.008	0.042	0.044
7439-89-6	26	FE	0.314	0.000	0.314	0.000	0.314	0.061	0.314	0.202
7440-48-4	27	CO	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-02-0	28	NI	0.007	0.000	0.007	0.000	0.007	0.001	0.007	0.004
7440-50-8	29	CU	0.090	0.000	0.090	0.000	0.090	0.017	0.090	0.012
7440-66-6	30	ZN	5.900	0.000	5.900	0.000	5.900	1.142	5.900	0.247
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
38-2	33	AS	0.010	0.000	0.010	0.000	0.010	0.002	0.010	0.003

continued (profile=90001)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7726-95-6	35	BR	0.083	0.000	0.083	0.000	0.083	0.016	0.083	0.069
7440-17-7	37	RB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-22-4	47	AG	0.013	0.000	0.013	0.000	0.013	0.002	0.013	0.016
7440-43-9	48	CD	0.058	0.000	0.058	0.000	0.058	0.011	0.058	0.033
7440-31-5	50	SN	0.443	0.000	0.443	0.000	0.443	0.086	0.443	0.408
7440-36-0	51	SB	0.084	0.000	0.084	0.000	0.084	0.016	0.084	0.055
7440-46-2	55	CS	0.002	0.000	0.002	0.000	0.002	0.000	0.002	0.003
7440-39-3	56	BA	0.004	0.000	0.004	0.000	0.004	0.001	0.004	0.007
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	2.665	0.000	2.665	0.000	2.665	0.516	2.665	6.527
7439-92-1	82	PB	4.115	0.000	4.115	0.000	4.115	0.796	4.115	0.990
	201	OC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
		SUM =	36.199		36.199		36.199		36.199	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

le Name:Chemical Manufacturing - Average

Profile Number:90002

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 301xxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.29	0.43	0.53

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	19.410	0.000	19.410	0.000	19.410	2.117	19.410	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-95-4	12	MG	0.475	0.150	0.600	0.150	0.558	0.103	0.600	0.000
7429-90-5	13	AL	2.062	0.500	2.862	0.400	2.591	0.383	2.862	0.125
7440-21-3	14	SI	4.447	0.500	5.947	5.000	5.438	1.830	5.947	0.770
7723-14-0	15	P	0.850	0.000	0.850	0.000	0.850	0.282	0.850	0.150
7704-34-9	16	S	1.340	0.150	0.940	0.050	1.076	0.114	1.090	0.045
7782-50-5	17	CL	4.147	0.300	2.123	0.300	2.810	0.366	1.623	0.015
7440-09-7	19	K	2.073	0.250	1.123	0.300	1.445	0.240	1.123	0.030
7440-70-2	20	CA	2.760	0.300	3.610	0.400	3.321	0.428	3.610	0.140
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.095	0.045	0.175	0.000	0.147	0.024	0.175	0.000
7440-62-2	23	V	0.007	0.000	0.010	0.010	0.009	0.004	0.010	0.000
7440-47-3	24	CR	0.015	0.000	0.016	0.010	0.016	0.004	0.016	0.000
7439-96-5	25	MN	0.122	0.025	0.117	0.015	0.119	0.018	0.117	0.000
7439-89-6	26	FE	1.815	0.200	1.865	0.200	1.848	0.242	1.865	0.030
7440-48-4	27	CO	0.013	0.000	0.000	0.000	0.004	0.001	0.000	0.000
7440-02-0	28	NI	0.025	0.000	0.025	0.000	0.025	0.002	0.025	0.000
7440-50-8	29	CU	0.039	0.000	0.031	0.000	0.033	0.003	0.031	0.000
7440-66-6	30	ZN	0.170	0.000	0.115	0.000	0.134	0.021	0.115	0.015
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
38-2	33	AS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000

continued (profile=90002)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.015	0.000	0.015	0.000	0.015	0.002	0.015	0.000
7726-95-6	35	BR	0.035	0.015	0.015	0.000	0.022	0.006	0.015	0.000
7440-17-7	37	RB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-24-6	38	SR	0.003	0.000	0.003	0.000	0.003	0.001	0.016	0.007
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-05-3	46	PD	0.005	0.000	0.005	0.000	0.005	0.002	0.005	0.020
7440-22-4	47	AG	0.020	0.000	0.020	0.000	0.020	0.003	0.020	0.030
7440-43-9	48	CD	0.035	0.000	0.035	0.000	0.035	0.004	0.035	0.042
7440-74-6	49	IN	0.022	0.000	0.022	0.000	0.022	0.007	0.022	0.046
7440-31-5	50	SN	0.033	0.000	0.033	0.000	0.033	0.011	0.033	0.055
7440-36-0	51	SB	0.025	0.000	0.025	0.000	0.025	0.008	0.025	0.105
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.175	0.000	0.175	0.000	0.175	0.058	0.175	0.300
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-92-1	82	PB	0.033	0.015	0.010	0.000	0.018	0.006	0.010	0.015
	201	OC	9.175	0.450	9.175	0.450	9.175	1.082	9.175	0.000
	202	EC	1.825	0.200	1.825	0.200	1.825	0.212	1.825	0.000
	203	SO4	3.125	0.250	2.150	0.050	2.481	0.255	2.650	0.000
	204	NO3	0.350	0.100	0.275	0.000	0.300	0.042	0.275	0.000
		SUM =	54.741		53.602		53.988		53.765	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

le Name:Food and Agriculture - Average

Profile Number:90003

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 302xxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.14	0.31	0.49

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7429-90-5	13	AL	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-21-3	14	SI	15.000	0.000	15.000	0.000	15.000	0.857	15.000	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7704-34-9	16	S	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-50-5	17	CL	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-09-7	19	K	0.550	0.000	0.550	0.000	0.550	0.031	0.550	0.000
7440-70-2	20	CA	0.550	0.000	0.550	0.000	0.550	0.031	0.550	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-62-2	23	V	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-47-3	24	CR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-96-5	25	MN	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-89-6	26	FE	0.050	0.000	0.050	0.000	0.050	0.003	0.050	0.000
7440-48-4	27	CO	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-02-0	28	NI	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-50-8	29	CU	0.050	0.000	0.050	0.000	0.050	0.003	0.050	0.000
7440-66-6	30	ZN	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
38-2	33	AS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000

continued (profile=90003)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7726-95-6	35	BR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-17-7	37	RB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-22-4	47	AG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-43-9	48	CD	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-36-0	51	SB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-92-1	82	PB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	200	TC	30.000	0.000	30.000	0.000	30.000	1.714	30.000	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	0.550	0.000	0.550	0.000	0.550	0.031	0.550	0.000
	204	NO3	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
		SUM =	46.750		46.750		46.750		46.750	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

le Name:Steel Production - Average

Profile Number:90004

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 303009xx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.52	0.58	0.60

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7429-90-5	13	AL	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-21-3	14	SI	4.950	0.000	4.950	0.000	4.950	1.358	4.950	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7704-34-9	16	S	13.315	0.000	8.165	0.000	11.955	2.086	13.315	0.000
7782-50-5	17	CL	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-09-7	19	K	5.000	0.000	5.000	0.000	5.000	0.861	5.000	0.000
7440-70-2	20	CA	0.550	0.000	0.550	0.000	0.550	0.095	0.550	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-62-2	23	V	0.550	0.000	0.550	0.000	0.550	0.095	0.550	0.000
7440-47-3	24	CR	2.000	0.000	1.275	0.000	1.808	0.314	2.000	0.000
7439-96-5	25	MN	0.550	0.000	0.550	0.000	0.550	0.095	0.550	0.000
7439-89-6	26	FE	11.000	0.000	13.500	0.000	11.660	2.078	11.000	0.000
7440-48-4	27	CO	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-02-0	28	NI	0.550	0.000	0.550	0.000	0.550	0.095	0.550	0.000
7440-50-8	29	CU	0.550	0.000	0.550	0.000	0.550	0.095	0.550	0.000
7440-66-6	30	ZN	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
-38-2	33	AS	0.050	0.000	0.050	0.000	0.050	0.009	0.050	0.000

continued (profile=90004)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7726-95-6	35	BR	0.050	0.000	0.050	0.000	0.050	0.009	0.050	0.000
7440-17-7	37	RB	0.050	0.000	0.050	0.000	0.050	0.009	0.050	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-22-4	47	AG	0.050	0.000	0.050	0.000	0.050	0.009	0.050	0.000
7440-43-9	48	CD	0.050	0.000	0.050	0.000	0.050	0.009	0.050	0.000
7440-31-5	50	SN	0.050	0.000	0.050	0.000	0.050	0.009	0.050	0.000
7440-36-0	51	SB	0.050	0.000	0.050	0.000	0.050	0.009	0.050	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-92-1	82	PB	0.550	0.000	0.550	0.000	0.550	0.095	0.550	0.000
	201	OC	10.000	0.000	10.000	0.000	10.000	2.744	10.000	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	40.000	0.000	37.500	0.000	39.340	6.739	40.000	0.000
	204	NO3	0.550	0.000	0.550	0.000	0.550	0.095	0.550	0.000
		SUM =	90.465		84.590		88.913		90.465	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

le Name:Lead Smelters - Average

Profile Number:90005

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 303010xx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.73	0.84	0.91

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7429-90-5	13	AL	0.531	0.566	0.613	0.420	0.548	0.598	0.428	0.411
7440-21-3	14	SI	1.719	1.232	2.079	0.948	1.781	1.350	1.452	0.949
7723-14-0	15	P	0.481	0.065	0.422	0.063	0.464	0.107	0.393	0.055
7704-34-9	16	S	8.664	1.533	7.794	1.514	8.347	2.299	7.263	1.367
7782-50-5	17	CL	1.477	0.549	1.019	0.269	1.363	0.537	1.267	0.425
7440-09-7	19	K	1.237	0.147	1.127	0.144	1.203	0.324	1.088	0.195
7440-70-2	20	CA	1.204	0.274	1.841	0.453	1.290	0.557	1.361	0.353
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.074	0.022	0.085	0.062	0.076	0.057	0.072	0.022
7440-62-2	23	V	0.003	0.003	0.002	0.002	0.003	0.003	0.003	0.000
7440-47-3	24	CR	0.023	0.004	0.032	0.006	0.025	0.008	0.030	0.005
7439-96-5	25	MN	0.094	0.094	0.147	0.078	0.100	0.107	0.117	0.068
7439-89-6	26	FE	2.002	1.008	3.066	1.165	2.162	1.407	2.790	1.292
7440-48-4	27	CO	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-02-0	28	NI	0.141	0.027	0.148	0.029	0.142	0.053	0.150	0.029
7440-50-8	29	CU	4.887	1.632	5.391	1.681	4.967	2.793	5.444	1.745
7440-66-6	30	ZN	11.351	1.633	12.578	1.733	11.662	3.358	11.657	2.065
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
38-2	33	AS	10.468	2.051	5.382	0.921	9.590	3.107	6.113	1.295

continued (profile=90005)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.092	0.009	0.066	0.008	0.087	0.020	0.083	0.041
7726-95-6	35	BR	0.141	0.056	0.117	0.050	0.135	0.071	0.128	0.064
7440-17-7	37	RB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-24-6	38	SR	0.048	0.022	0.079	0.034	0.052	0.038	0.066	0.032
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-05-3	46	PD	0.630	0.121	0.156	0.032	0.553	0.186	0.248	0.044
7440-22-4	47	AG	0.348	0.119	0.239	0.082	0.329	0.134	0.268	0.129
7440-43-9	48	CD	5.847	1.003	3.919	0.770	5.362	1.484	4.553	0.855
7440-74-6	49	IN	0.012	0.000	0.033	0.006	0.017	0.009	0.035	0.008
7440-31-5	50	SN	1.039	0.110	0.930	0.126	1.027	0.299	0.929	0.151
7440-36-0	51	SB	1.986	0.899	1.499	0.859	1.904	1.093	1.666	1.093
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.140	0.168	0.123	0.232	0.136	0.236	0.129	0.124
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.105	0.017	0.083	0.018	0.100	0.028	0.076	0.015
7439-92-1	82	PB	22.465	3.937	20.101	4.201	21.905	6.061	22.148	4.049
	201	OC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
		SUM =	77.209		69.071		75.330		69.957	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

ile Name:Metal Mining - General Processes - Average

Profile Number:90006

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 303024xx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.15	0.34	0.51

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7429-90-5	13	AL	14.859	1.581	10.243	1.129	11.601	0.982	10.243	0.000
7440-21-3	14	SI	30.907	3.278	23.183	2.537	25.454	2.089	23.183	0.000
7723-14-0	15	P	0.510	0.052	0.274	0.028	0.344	0.030	0.274	0.000
7704-34-9	16	S	5.206	0.701	3.824	0.533	4.230	0.419	3.824	0.000
7782-50-5	17	CL	0.087	0.035	0.075	0.019	0.079	0.013	0.075	0.000
7440-09-7	19	K	3.086	0.327	2.635	0.291	2.768	0.222	2.635	0.000
7440-70-2	20	CA	0.762	0.080	0.967	0.113	0.906	0.066	0.967	0.000
7440-32-6	22	TI	0.311	0.032	0.388	0.040	0.365	0.026	0.388	0.000
7440-62-2	23	V	0.038	0.000	0.033	0.000	0.034	0.002	0.033	0.000
7440-47-3	24	CR	0.040	0.000	0.029	0.000	0.032	0.002	0.029	0.000
7439-96-5	25	MN	0.093	0.005	0.098	0.009	0.096	0.006	0.098	0.000
7439-89-6	26	FE	8.043	0.925	7.135	0.801	7.402	0.619	7.135	0.000
7440-02-0	28	NI	0.032	0.005	0.027	0.005	0.029	0.003	0.027	0.000
7440-50-8	29	CU	6.080	1.090	6.171	1.109	6.144	0.652	6.171	0.000
7440-66-6	30	ZN	1.495	0.239	1.968	0.324	1.829	0.177	1.968	0.000
7440-55-3	31	GA	0.000	0.000	0.013	0.035	0.009	0.010	0.013	0.000
7440-38-2	33	AS	0.283	0.054	0.282	0.050	0.283	0.031	0.282	0.000
7782-49-2	34	SE	0.006	0.000	0.000	0.000	0.002	0.000	0.000	0.000
7726-95-6	35	BR	0.025	0.000	0.020	0.000	0.022	0.002	0.020	0.000
-17-7	37	RB	0.000	0.000	0.014	0.000	0.010	0.001	0.014	0.000

continued (profile=90006)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-24-6	38	SR	0.021	0.000	0.026	0.000	0.024	0.002	0.026	0.000
7440-65-5	39	Y	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.013	0.000	0.009	0.001	0.013	0.000
7439-98-7	42	MO	0.000	0.000	0.167	0.026	0.118	0.011	0.167	0.000
7440-05-3	46	PD	0.000	0.019	0.005	0.000	0.004	0.006	0.005	0.000
7440-22-4	47	AG	0.032	0.028	0.016	0.000	0.021	0.008	0.016	0.000
7440-43-9	48	CD	0.030	0.041	0.013	0.000	0.018	0.012	0.013	0.000
7440-74-6	49	IN	0.011	0.043	0.010	0.000	0.010	0.013	0.010	0.000
7440-31-5	50	SN	0.009	0.050	0.013	0.000	0.012	0.015	0.013	0.000
7440-36-0	51	SB	0.079	0.092	0.033	0.015	0.046	0.028	0.033	0.000
7440-39-3	56	BA	0.191	0.250	0.026	0.039	0.074	0.075	0.026	0.000
7439-91-0	57	LA	0.000	0.000	0.000	0.060	NE	0.018	0.000	0.000
7439-97-6	80	HG	0.005	0.000	0.005	0.000	0.005	0.000	0.005	0.000
7439-92-1	82	PB	0.695	0.083	0.491	0.061	0.551	0.052	0.491	0.000
	201	OC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	204	SO3	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
		SUM =	72.936		58.197		62.531		58.197	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

le Name:Primary Metal Production - Average

Profile Number:90007

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 303xxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.55	0.68	0.77

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-42-8	5	B	0.010	0.005	0.010	0.000	0.007	0.007	0.000	0.000
7782-41-4	9	F	1.302	1.453	1.207	0.436	1.052	1.158	1.405	0.777
7440-23-5	11	NA	1.163	0.556	1.074	0.154	0.892	0.631	0.379	0.000
7439-95-4	12	MG	0.150	1.006	0.145	0.926	0.148	0.827	0.147	0.000
7429-90-5	13	AL	4.268	1.986	3.963	1.219	3.695	1.907	3.697	0.477
7440-21-3	14	SI	5.635	1.427	4.617	1.084	4.825	1.260	4.398	0.714
7723-14-0	15	P	0.302	0.049	0.241	0.045	0.270	0.075	0.227	0.038
7704-34-9	16	S	7.093	1.394	5.603	1.063	6.389	1.841	6.092	1.054
7782-50-5	17	CL	1.750	0.428	1.361	0.192	1.580	0.487	2.224	0.302
7440-09-7	19	K	3.122	0.913	2.421	0.905	2.701	0.925	2.936	0.147
7440-70-2	20	CA	1.318	0.290	1.596	0.368	1.328	0.417	1.427	0.323
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.092	0.021	0.103	0.046	0.096	0.041	0.094	0.017
7440-62-2	23	V	0.102	0.010	0.069	0.005	0.082	0.032	0.073	0.003
7440-47-3	24	CR	0.391	0.003	0.189	0.006	0.292	0.109	0.394	0.004
7439-96-5	25	MN	1.114	0.238	1.130	0.235	1.111	0.512	1.131	0.056
7439-89-6	26	FE	4.635	0.905	5.618	0.968	4.897	1.293	5.266	1.017
7440-48-4	27	CO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-02-0	28	NI	0.174	0.027	0.148	0.024	0.156	0.051	0.162	0.027
7440-50-8	29	CU	3.251	1.179	3.466	1.212	3.270	1.934	3.497	1.202
7440-66-6	30	ZN	6.192	1.158	6.612	1.210	6.225	2.318	6.276	1.437
7440-55-3	31	GA	0.001	0.004	0.003	0.011	0.002	0.004	0.004	0.003
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
38-2	33	AS	9.923	1.412	7.499	0.634	9.496	4.187	7.843	0.891

continued (profile=90007)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.081	0.006	0.068	0.006	0.078	0.028	0.076	0.028
7726-95-6	35	BR	0.119	0.065	0.109	0.076	0.115	0.073	0.110	0.044
7440-17-7	37	RB	0.034	0.000	0.036	0.000	0.035	0.010	0.036	0.000
7440-24-6	38	SR	0.037	0.016	0.048	0.024	0.036	0.026	0.047	0.022
7440-65-5	39	Y	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.003	0.000	0.001	0.000	0.002	0.001	0.004	0.000
7439-98-7	42	MO	0.000	0.001	0.018	0.008	0.013	0.004	0.018	0.001
7440-05-3	46	PD	0.298	0.084	0.074	0.022	0.262	0.128	0.119	0.031
7440-22-4	47	AG	0.178	0.083	0.123	0.056	0.167	0.093	0.137	0.089
7440-43-9	48	CD	2.810	0.690	1.895	0.530	2.579	1.021	2.196	0.589
7440-74-6	49	IN	0.010	0.018	0.017	0.006	0.010	0.008	0.018	0.005
7440-31-5	50	SN	0.501	0.079	0.452	0.087	0.498	0.206	0.450	0.104
7440-36-0	51	SB	0.981	0.620	0.734	0.591	0.931	0.752	0.820	0.752
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.091	0.154	0.071	0.162	0.081	0.165	0.083	0.086
7439-91-0	57	LA	0.000	0.001	0.000	0.020	0.000	0.006	0.000	0.001
7440-45-1	58	CE	0.029	0.000	0.029	0.000	0.029	0.010	0.029	0.000
7439-97-6	80	HG	0.051	0.012	0.041	0.012	0.049	0.019	0.037	0.010
7439-92-1	82	PB	11.682	2.713	10.490	2.892	11.355	4.178	11.320	2.788
7440-69-9	83	BI	0.002	0.007	0.002	0.000	0.001	0.005	0.000	0.000
	200	TC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	201	OC	3.216	1.455	3.011	0.459	2.691	1.662	2.899	0.696
	202	EC	0.341	0.243	0.304	0.346	0.286	0.312	1.002	0.634
	203	SO4	6.632	2.315	5.595	0.269	5.850	2.787	6.335	1.157
	204	SO3	0.416	0.644	0.394	0.789	0.398	0.644	0.411	0.020
		SUM =	79.500		70.587		73.980		73.819	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Secondary Metal Production - Average

Profile Number:90008

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 304xxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.50	0.59	0.66

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.144	0.000	0.144	NE	0.196	0.000	0.000
7440-23-5	11	NA	0.630	0.139	0.630	0.139	0.630	0.271	0.630	0.000
7439-95-4	12	MG	0.542	0.205	0.542	0.205	0.542	0.456	0.542	0.000
7429-90-5	13	AL	0.439	0.067	0.723	0.159	0.470	0.249	0.439	0.016
7440-21-3	14	SI	3.229	0.117	3.653	0.321	3.275	1.418	3.229	0.019
7723-14-0	15	P	0.067	0.022	0.067	0.038	0.067	0.040	0.067	0.008
7704-34-9	16	S	1.364	0.053	1.300	0.089	1.365	0.250	1.377	0.197
7782-50-5	17	CL	7.671	0.399	7.218	0.587	7.623	2.159	7.673	0.063
7440-09-7	19	K	1.961	0.211	1.983	0.399	1.963	0.681	1.961	0.019
7440-70-2	20	CA	1.112	2.660	1.169	4.651	1.118	1.872	1.112	0.030
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.072	0.133	0.079	0.232	0.073	0.096	0.072	0.000
7440-62-2	23	V	0.008	0.003	0.008	0.004	0.008	0.005	0.008	0.000
7440-47-3	24	CR	0.237	0.404	0.246	0.404	0.241	0.562	0.243	0.000
7439-96-5	25	MN	1.291	0.260	1.293	0.260	1.291	0.650	1.291	0.000
7439-89-6	26	FE	5.704	0.862	5.794	0.867	5.715	2.351	5.705	0.029
7440-48-4	27	CO	0.005	0.000	0.005	0.000	0.005	0.002	0.005	0.000
7440-02-0	28	NI	0.312	0.020	0.313	0.020	0.312	0.110	0.311	0.007
7440-50-8	29	CU	4.610	0.009	4.615	0.010	4.610	1.062	4.609	1.563
7440-66-6	30	ZN	5.732	0.035	5.738	0.035	5.730	1.251	5.728	1.824
7440-55-3	31	GA	0.000	0.000	0.000	0.001	0.000	0.001	0.000	0.000
7440-56-4	32	GE	0.000	0.001	0.000	0.000	NE	0.001	0.000	0.000
7440-38-2	33	AS	0.133	0.002	0.134	0.006	0.134	0.027	0.134	0.034

continued (profile=90008)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.034	0.001	0.033	0.002	0.034	0.008	0.034	0.011
7726-95-6	35	BR	0.024	0.003	0.021	0.006	0.023	0.005	0.024	0.003
7440-17-7	37	RB	0.003	0.001	0.003	0.002	0.003	0.002	0.003	0.000
7440-24-6	38	SR	0.001	0.001	0.001	0.003	0.001	0.003	0.001	0.000
7440-67-7	40	ZR	0.000	0.005	0.003	0.015	0.001	0.012	0.000	0.000
7440-05-3	46	PD	0.006	0.000	0.006	0.000	0.006	0.001	0.006	0.003
7440-22-4	47	AG	0.005	0.005	0.008	0.015	0.005	0.012	0.005	0.000
7440-43-9	48	CD	0.077	0.006	0.084	0.020	0.078	0.035	0.077	0.007
7440-74-6	49	IN	0.003	0.000	0.003	0.000	0.003	0.001	0.003	0.005
7440-31-5	50	SN	0.210	0.011	0.206	0.105	0.210	0.099	0.210	0.013
7440-36-0	51	SB	6.517	1.048	7.420	2.061	7.125	1.797	7.440	0.015
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.050	0.035	0.047	0.117	0.050	0.100	0.050	0.033
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.005	0.001	0.008	0.004	0.007	0.003	0.008	0.000
7439-92-1	82	PB	5.311	0.020	5.310	0.022	5.310	2.246	5.309	0.337
	201	OC	1.583	0.000	1.583	0.000	1.583	0.688	1.583	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	4.836	0.375	4.836	0.375	4.836	1.826	4.836	0.000
	204	NO3	0.092	0.404	0.092	0.404	0.092	0.551	0.092	0.000
		SUM =	53.876		55.174		54.539		54.817	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Secondary Aluminum - Average

Profile Number:90009

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 304001xx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.66	0.71	0.76

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7429-90-5	13	AL	0.724	0.058	2.429	0.316	0.909	0.535	0.724	0.000
7440-21-3	14	SI	3.206	0.223	5.750	0.746	3.483	1.363	3.206	0.000
7723-14-0	15	P	0.186	0.048	0.187	0.081	0.187	0.096	0.186	0.000
7704-34-9	16	S	1.442	0.110	0.980	0.185	1.391	0.365	1.442	0.000
7782-50-5	17	CL	17.106	0.805	14.373	1.326	16.809	3.221	17.106	0.000
7440-09-7	19	K	5.293	0.346	5.423	0.719	5.307	1.467	5.293	0.000
7440-70-2	20	CA	1.540	0.021	1.882	0.064	1.577	0.365	1.540	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.038	0.002	0.081	0.011	0.042	0.015	0.038	0.000
7440-62-2	23	V	0.003	0.001	0.005	0.004	0.003	0.003	0.003	0.000
7440-47-3	24	CR	0.039	0.002	0.057	0.006	0.041	0.010	0.039	0.000
7439-96-5	25	MN	0.280	0.001	0.294	0.005	0.281	0.065	0.280	0.000
7439-89-6	26	FE	3.126	0.011	3.659	0.085	3.184	0.721	3.126	0.000
7440-48-4	27	CO	0.025	0.000	0.025	0.000	0.025	0.006	0.025	0.000
7440-02-0	28	NI	0.292	0.002	0.301	0.007	0.293	0.065	0.292	0.000
7440-50-8	29	CU	0.046	0.003	0.077	0.010	0.049	0.015	0.046	0.000
7440-66-6	30	ZN	0.065	0.004	0.126	0.016	0.071	0.025	0.065	0.000
7440-55-3	31	GA	0.000	0.001	0.000	0.003	NE	0.003	0.000	0.000
7440-56-4	32	GE	0.000	0.004	0.000	0.000	NE	0.003	0.000	0.000
7440-38-2	33	AS	0.005	0.004	0.003	0.010	0.005	0.009	0.005	0.000

continued (profile=90009)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.008	0.001	0.006	0.004	0.008	0.004	0.008	0.000
7726-95-6	35	BR	0.033	0.003	0.019	0.006	0.031	0.009	0.033	0.000
7440-17-7	37	RB	0.002	0.002	0.000	0.005	0.002	0.005	0.002	0.000
7440-24-6	38	SR	0.003	0.002	0.002	0.006	0.002	0.006	0.003	0.000
7440-67-7	40	ZR	0.001	0.011	0.019	0.031	0.003	0.030	0.001	0.000
7440-22-4	47	AG	0.010	0.010	0.030	0.030	0.012	0.029	0.010	0.000
7440-43-9	48	CD	0.000	0.013	0.042	0.040	0.005	0.039	0.000	0.000
7440-31-5	50	SN	0.049	0.018	0.025	0.056	0.046	0.053	0.049	0.000
7440-36-0	51	SB	0.298	0.048	0.176	0.115	0.285	0.127	0.298	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.018	0.080	0.000	0.245	0.016	0.230	0.018	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.002	0.000	0.007	NE	0.007	0.000	0.000
7439-92-1	82	PB	0.065	0.006	0.072	0.016	0.065	0.020	0.065	0.000
	201	OC	6.500	0.000	6.500	0.000	6.500	1.532	6.500	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	8.000	0.000	8.000	0.000	8.000	1.886	8.000	0.000
	204	NO3	0.275	0.000	0.275	0.000	0.275	0.065	0.275	0.000
		SUM =	48.678		50.818		48.907		48.678	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Gray Iron Foundries - Average

Profile Number:90010

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 304003xx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.84	0.91	0.92

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	1.650	0.000	1.650	0.000	1.650	0.303	1.650	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7429-90-5	13	AL	1.200	0.000	1.200	0.000	1.200	0.217	1.200	0.000
7440-21-3	14	SI	13.050	0.000	13.050	0.000	13.050	3.113	13.050	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7704-34-9	16	S	1.150	0.000	1.150	0.000	1.150	0.297	1.150	0.000
7782-50-5	17	CL	1.695	0.000	1.695	0.000	1.695	0.335	1.695	0.000
7440-09-7	19	K	3.100	0.000	3.100	0.000	3.100	0.560	3.100	0.000
7440-70-2	20	CA	1.250	0.000	1.250	0.000	1.250	0.229	1.250	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.270	0.000	0.270	0.000	0.270	0.061	0.270	0.000
7440-62-2	23	V	0.007	0.000	0.007	0.000	0.007	0.001	0.007	0.000
7440-47-3	24	CR	0.038	0.000	0.038	0.000	0.038	0.007	0.038	0.000
7439-96-5	25	MN	3.100	0.000	3.100	0.000	3.100	0.620	3.100	0.000
7439-89-6	26	FE	10.350	0.000	10.350	0.000	10.350	2.068	10.350	0.000
7440-48-4	27	CO	0.003	0.000	0.003	0.000	0.003	0.001	0.003	0.000
7440-02-0	28	NI	0.067	0.000	0.067	0.000	0.067	0.013	0.067	0.000
7440-50-8	29	CU	0.190	0.000	0.190	0.000	0.190	0.037	0.190	0.000
7440-66-6	30	ZN	1.865	0.000	1.865	0.000	1.865	0.381	1.865	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-38-2	33	AS	0.013	0.000	0.013	0.000	0.013	0.002	0.013	0.000

continued (profile=90010)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
7726-95-6	35	BR	0.015	0.000	0.015	0.000	0.015	0.003	0.015	0.000
7440-17-7	37	RB	0.017	0.000	0.017	0.000	0.017	0.003	0.017	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-22-4	47	AG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-43-9	48	CD	0.006	0.000	0.006	0.000	0.006	0.002	0.006	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-36-0	51	SB	0.185	0.000	0.185	0.000	0.185	0.048	0.185	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-92-1	82	PB	0.385	0.000	0.385	0.000	0.385	0.074	0.385	0.000
	201	OC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	204	NO3	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
		SUM =	39.607		39.607		39.607		39.607	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Steel Foundry - General

Profile Number:90011

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 304007xx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.77	0.84	0.86

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.354	0.000	0.354	NE	0.481	0.000	0.000
7440-23-5	11	NA	0.630	0.339	0.630	0.339	0.630	0.492	0.630	0.000
7439-95-4	12	MG	3.250	0.502	3.250	0.502	3.250	1.117	3.250	0.000
7429-90-5	13	AL	0.325	0.113	0.325	0.113	0.325	0.177	0.325	0.000
7440-21-3	14	SI	2.500	0.148	2.500	0.148	2.500	0.709	2.500	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7704-34-9	16	S	0.980	0.049	0.975	0.049	0.980	0.274	0.980	0.000
7782-50-5	17	CL	15.925	0.552	15.925	0.552	15.925	3.608	15.925	0.000
7440-09-7	19	K	2.460	0.049	2.460	0.049	2.460	0.490	2.460	0.000
7440-70-2	20	CA	3.375	0.403	3.375	0.403	3.375	1.008	3.375	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.100	0.014	0.100	0.014	0.100	0.033	0.100	0.000
7440-62-2	23	V	0.030	0.007	0.030	0.007	0.030	0.013	0.030	0.000
7440-47-3	24	CR	1.325	0.990	1.325	0.990	1.325	1.378	1.325	0.000
7439-96-5	25	MN	4.350	0.636	4.350	0.636	4.350	1.466	4.350	0.000
7439-89-6	26	FE	20.500	2.121	20.500	2.121	20.500	5.326	20.500	0.000
7440-48-4	27	CO	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-02-0	28	NI	1.350	0.049	1.350	0.049	1.350	0.262	1.350	0.000
7440-50-8	29	CU	0.165	0.021	0.165	0.021	0.165	0.048	0.165	0.000
7440-66-6	30	ZN	0.625	0.085	0.625	0.085	0.625	0.200	0.625	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000

continued (profile=90011)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7726-95-6	35	BR	0.025	0.000	0.025	0.000	0.025	0.006	0.025	0.000
7440-17-7	37	RB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-22-4	47	AG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-43-9	48	CD	0.025	0.000	0.025	0.000	0.025	0.006	0.025	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-36-0	51	SB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.275	0.000	0.275	0.000	0.275	0.065	0.275	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-92-1	82	PB	0.405	0.049	0.405	0.049	0.405	0.123	0.405	0.000
	201	OC	3.000	0.000	3.000	0.000	3.000	0.704	3.000	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	17.250	0.919	17.250	0.919	17.250	3.972	17.250	0.000
	204	NO3	0.275	0.990	0.275	0.990	0.275	1.348	0.275	0.000
		SUM =	79.145		79.140		79.145		79.145	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Clay and Fly Ash Sintering - Average

Profile Number:90012

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 305009xx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.09	0.18	0.27

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.025	0.074	0.000	0.316	NE	0.255	0.025	0.000
7440-23-5	11	NA	0.520	0.100	0.345	0.125	0.298	0.132	0.275	0.000
7439-95-4	12	MG	1.590	0.884	0.625	0.376	0.820	0.802	1.015	0.000
7429-90-5	13	AL	0.465	0.293	1.830	3.042	0.382	2.690	0.605	0.000
7440-21-3	14	SI	3.000	3.041	7.450	10.646	1.382	9.745	3.200	0.000
7723-14-0	15	P	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7704-34-9	16	S	3.200	4.676	0.475	0.459	0.450	4.123	2.670	0.000
7782-50-5	17	CL	1.375	1.062	0.975	0.539	0.495	0.996	1.330	0.000
7440-09-7	19	K	1.020	0.816	0.600	0.806	0.371	0.977	0.635	0.000
7440-70-2	20	CA	15.070	2.830	13.185	6.162	13.613	2.682	12.970	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.007	0.020	0.017	0.347	NE	0.304	0.007	0.000
7440-62-2	23	V	0.004	0.006	0.010	0.007	0.003	0.008	0.008	0.000
7440-47-3	24	CR	0.004	0.011	0.002	0.009	NE	0.009	0.004	0.000
7439-96-5	25	MN	0.039	0.029	0.033	0.019	0.019	0.030	0.036	0.000
7439-89-6	26	FE	0.435	0.435	0.300	0.175	0.201	0.404	0.330	0.000
7440-48-4	27	CO	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-02-0	28	NI	0.013	0.008	0.019	0.163	0.011	0.143	0.013	0.000
7440-50-8	29	CU	0.019	0.018	0.048	0.013	0.017	0.019	0.029	0.000
7440-66-6	30	ZN	0.009	0.006	0.000	0.010	0.003	0.007	0.002	0.000
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000

continued (profile=90012)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7726-95-6	35	BR	0.009	0.010	0.005	0.010	NE	0.009	0.009	0.000
7440-17-7	37	RB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-24-6	38	SR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-67-7	40	ZR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-22-4	47	AG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-43-9	48	CD	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-31-5	50	SN	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-36-0	51	SB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-92-1	82	PB	0.004	0.008	0.000	0.007	0.001	0.009	0.000	0.000
	201	OC	14.350	5.313	4.550	1.717	2.725	5.196	12.950	0.000
	202	EC	7.435	9.195	13.800	10.683	1.392	12.554	8.635	0.000
	203	SO4	9.600	17.680	1.265	1.510	0.850	15.612	8.465	0.000
	204	NO3	1.085	1.495	0.415	0.490	0.097	1.352	0.800	0.000
		SUM =	59.278		45.949		23.130		54.013	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

Profile Name:Mineral Products - Average

Profile Number:90013

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 305xxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.30	0.45	0.54

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
31-7	4	BE	0.002	0.006	0.002	0.000	0.002	0.005	0.000	0.000
-42-8	5	B	0.005	0.015	0.005	0.000	0.004	0.012	0.000	0.000
7782-41-4	9	F	0.025	0.033	0.021	0.135	0.016	0.109	0.025	0.033
7440-23-5	11	NA	1.466	0.412	1.435	0.053	1.326	0.842	0.050	0.000
7439-95-4	12	MG	0.328	0.377	0.152	0.160	0.182	0.342	0.185	0.000
7429-90-5	13	AL	2.111	0.415	1.486	1.307	1.362	1.187	1.426	0.223
7440-21-3	14	SI	8.834	3.146	8.274	5.346	3.212	5.945	7.672	0.618
7723-14-0	15	P	0.045	0.030	0.022	0.009	0.029	0.020	0.027	0.019
7704-34-9	16	S	5.143	2.985	4.636	2.120	4.569	3.297	5.245	2.206
7782-50-5	17	CL	2.173	1.163	2.025	0.933	1.787	1.401	1.834	0.934
7440-09-7	19	K	1.306	0.587	1.026	0.356	0.931	0.613	0.952	0.216
7440-70-2	20	CA	9.860	1.812	8.957	2.930	8.893	1.786	10.813	1.353
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.134	0.019	0.064	0.148	0.088	0.131	0.066	0.012
7440-62-2	23	V	0.004	0.002	0.003	0.003	0.002	0.004	0.003	0.000
7440-47-3	24	CR	0.126	0.011	0.077	0.004	0.091	0.032	0.172	0.007
7439-96-5	25	MN	0.071	0.014	0.067	0.008	0.065	0.031	0.067	0.002
7439-89-6	26	FE	0.779	0.225	0.599	0.127	0.567	0.240	0.757	0.111
7440-48-4	27	CO	0.175	0.096	0.260	0.090	0.233	0.141	0.164	0.090
7440-02-0	28	NI	0.061	0.029	0.017	0.069	0.029	0.065	0.057	0.011
7440-50-8	29	CU	0.062	0.022	0.082	0.023	0.071	0.017	0.116	0.033
7440-66-6	30	ZN	0.127	0.018	0.107	0.010	0.108	0.031	0.122	0.015
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-38-2	33	AS	0.008	0.009	0.009	0.000	0.008	0.004	0.009	0.002

continued (profile=90013)

CAS	Species No.	Species	0-2.5 um(a) % wt.	Unc.	2.5-10 um(a) % wt.	Unc.	0-10 um(b) % wt	Unc.	Total Particulate Measured(a) % wt.	Unc.
7782-49-2	34	SE	0.057	0.001	0.057	0.000	0.056	0.027	0.057	0.001
7726-95-6	35	BR	0.012	0.005	0.003	0.004	0.005	0.004	0.003	0.001
7440-17-7	37	RB	0.008	0.006	0.008	0.000	0.006	0.006	0.006	0.002
7440-24-6	38	SR	0.012	0.004	0.011	0.000	0.011	0.002	0.012	0.001
7440-67-7	40	ZR	0.001	0.004	0.001	0.000	0.000	0.002	0.000	0.001
7439-98-7	42	MO	0.005	0.005	0.005	0.000	0.005	0.004	0.006	0.004
7440-05-3	46	PD	0.000	0.007	0.000	0.000	0.000	0.003	0.000	0.001
7440-22-4	47	AG	0.001	0.021	0.001	0.000	0.000	0.006	0.000	0.001
7440-43-9	48	CD	0.015	0.031	0.004	0.000	0.008	0.010	0.008	0.002
7440-74-6	49	IN	0.003	0.016	0.001	0.003	0.001	0.006	0.000	0.004
7440-31-5	50	SN	0.004	0.040	0.002	0.005	0.002	0.012	0.002	0.004
7440-36-0	51	SB	0.021	0.070	0.008	0.011	0.012	0.022	0.000	0.009
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.061	0.204	0.008	0.029	0.023	0.063	0.024	0.024
7439-91-0	57	LA	0.002	0.007	0.002	0.000	0.002	0.006	0.002	0.005
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.002	0.005	0.000	0.000	0.001	0.001	0.000	0.000
7439-92-1	82	PB	0.242	0.086	0.201	0.005	0.173	0.105	0.171	0.042
7440-69-9	83	BI	0.091	0.302	0.091	0.000	0.068	0.232	0.000	0.000
	200	TC	0.091	0.000	0.050	0.000	0.064	0.017	0.182	0.000
	201	OC	5.255	2.273	3.715	0.732	3.130	2.510	5.439	0.203
	202	EC	1.467	3.922	2.624	4.555	0.363	5.354	1.692	0.092
	203	SO4	14.061	8.087	13.765	0.644	12.723	7.867	14.641	3.040
	204	NO3	0.271	0.637	0.150	0.209	0.087	0.577	0.269	0.199
	206	CO3	0.000	0.000	0.786	0.000	0.375	0.185	0.849	0.000
		SUM =	54.527		50.819		40.690		53.125	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Petroleum Industry - Average

Profile Number:90014

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 306xxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um)	:	(0-2.5)	(0-6)	(0-10)
Mass Fraction	:	0.45	0.46	0.48

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
-41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-23-5	11	NA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-95-4	12	MG	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7429-90-5	13	AL	2.484	0.161	11.735	1.353	NE	2.420	2.484	0.000
7440-21-3	14	SI	5.898	0.380	25.285	2.989	NE	5.265	5.898	0.000
7723-14-0	15	P	0.000	0.052	0.000	0.223	NE	0.201	0.000	0.000
7704-34-9	16	S	10.056	0.148	8.918	0.530	7.800	2.169	10.056	0.000
7782-50-5	17	CL	0.000	0.037	0.000	0.129	NE	0.118	0.000	0.000
7440-09-7	19	K	0.019	0.001	0.059	0.013	NE	0.016	0.019	0.000
7440-70-2	20	CA	2.518	0.001	2.578	0.013	2.500	0.663	2.518	0.000
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.059	0.037	0.059	0.194	NE	0.174	0.059	0.000
7440-62-2	23	V	0.000	0.016	0.000	0.086	NE	0.076	0.000	0.000
7440-47-3	24	CR	0.275	0.008	0.275	0.039	0.275	0.081	0.275	0.000
7439-96-5	25	MN	0.025	0.002	0.025	0.013	0.025	0.013	0.025	0.000
7439-89-6	26	FE	0.399	0.008	0.558	0.047	0.275	0.100	0.399	0.000
7440-48-4	27	CO	1.000	0.000	1.000	0.000	1.000	0.265	1.000	0.000
7440-02-0	28	NI	0.289	0.001	0.304	0.007	0.275	0.073	0.289	0.000
7440-50-8	29	CU	0.027	0.000	0.028	0.003	0.025	0.007	0.027	0.000
7440-66-6	30	ZN	0.278	0.000	0.281	0.002	0.275	0.073	0.278	0.000
7440-55-3	31	GA	0.001	0.000	0.003	0.001	NE	0.001	0.001	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-38-2	33	AS	0.000	0.001	0.000	0.005	NE	0.004	0.000	0.000

continued (profile=90014)

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7782-49-2	34	SE	0.276	0.000	0.279	0.002	0.275	0.073	0.276	0.000
7726-95-6	35	BR	0.025	0.000	0.027	0.003	0.025	0.007	0.025	0.000
7440-17-7	37	RB	0.001	0.000	0.002	0.003	NE	0.002	0.001	0.000
7440-24-6	38	SR	0.028	0.000	0.028	0.004	0.025	0.007	0.028	0.000
7440-67-7	40	ZR	0.025	0.001	0.038	0.018	0.025	0.017	0.025	0.000
7440-22-4	47	AG	0.000	0.001	0.022	0.016	NE	0.014	0.000	0.000
7440-43-9	48	CD	0.000	0.001	0.009	0.021	NE	0.019	0.000	0.000
7440-31-5	50	SN	0.001	0.002	0.000	0.030	NE	0.026	0.001	0.000
7440-36-0	51	SB	0.001	0.004	0.000	0.057	NE	0.050	0.001	0.000
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.000	0.008	0.154	0.139	NE	0.125	0.000	0.000
7439-91-0	57	LA	0.123	0.018	0.323	0.236	NE	0.216	0.123	0.000
7440-45-1	58	CE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.000	0.000	0.003	0.004	NE	0.004	0.000	0.000
7439-92-1	82	PB	0.029	0.001	0.037	0.008	0.025	0.010	0.029	0.000
	201	OC	3.500	0.000	3.500	0.000	3.500	0.928	3.500	0.000
	202	EC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
	203	SO4	23.500	0.000	23.500	0.000	23.500	6.231	23.500	0.000
	204	NO3	0.275	0.000	0.275	0.000	0.275	0.073	0.275	0.000
		SUM =	51.112		79.305		40.100		51.112	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Pulp and Paper Industry

Profile Number:90015

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 307xxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.34	0.40	0.44

CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
41-7	4	BE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-42-8	5	B	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7782-41-4	9	F	0.237	1.096	0.237	0.000	0.212	0.986	0.358	0.871
7440-23-5	11	NA	10.775	5.139	10.200	1.443	7.577	5.743	10.758	4.014
7439-95-4	12	MG	0.091	0.184	0.146	0.281	0.091	0.282	0.091	0.000
7429-90-5	13	AL	0.090	0.161	0.078	0.032	0.061	0.150	0.122	0.134
7440-21-3	14	SI	0.182	0.167	0.233	0.092	0.079	0.176	0.214	0.069
7723-14-0	15	P	0.026	0.100	0.026	0.000	0.024	0.096	0.039	0.085
7704-34-9	16	S	5.670	1.152	5.611	0.729	5.135	1.998	5.609	0.845
7782-50-5	17	CL	4.104	0.749	3.756	2.122	0.584	2.497	4.105	0.165
7440-09-7	19	K	4.799	3.548	4.359	3.537	4.134	4.339	4.790	0.095
7440-70-2	20	CA	0.424	0.100	0.519	0.212	0.305	0.240	0.433	0.031
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.003	0.002	0.003	0.000	0.003	0.002	0.003	0.002
7440-62-2	23	V	0.009	0.003	0.009	0.000	0.009	0.005	0.008	0.003
7440-47-3	24	CR	0.002	0.004	0.002	0.000	0.002	0.004	0.004	0.004
7439-96-5	25	MN	0.034	0.025	0.017	0.025	0.016	0.029	0.035	0.004
7439-89-6	26	FE	0.075	0.100	0.048	0.041	0.029	0.097	0.079	0.060
7440-48-4	27	CO	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-02-0	28	NI	0.007	0.018	0.007	0.000	0.007	0.017	0.009	0.015
7440-50-8	29	CU	0.003	0.006	0.003	0.006	0.003	0.007	0.003	0.002
7440-66-6	30	ZN	0.017	0.007	0.005	0.001	0.004	0.007	0.018	0.005
7440-55-3	31	GA	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-56-4	32	GE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-38-2	33	AS	0.001	0.003	0.001	0.000	0.001	0.003	0.001	0.003

continued (profile=90015)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.002
7726-95-6	35	BR	0.010	0.004	0.010	0.000	0.009	0.006	0.009	0.004
7440-17-7	37	RB	0.002	0.002	0.002	0.000	0.002	0.002	0.004	0.003
7440-24-6	38	SR	0.007	0.003	0.007	0.000	0.007	0.004	0.008	0.003
7440-65-5	39	Y	0.000	0.001	0.000	0.000	0.000	0.001	0.001	0.001
7440-67-7	40	ZR	0.003	0.006	0.003	0.000	0.002	0.006	0.005	0.010
7439-98-7	42	MO	0.002	0.005	0.002	0.000	0.001	0.004	0.005	0.008
7440-05-3	46	PD	0.003	0.007	0.003	0.000	0.002	0.006	0.005	0.007
7440-22-4	47	AG	0.006	0.010	0.006	0.000	0.005	0.009	0.011	0.012
7440-43-9	48	CD	0.003	0.007	0.003	0.000	0.003	0.007	0.005	0.008
7440-74-6	49	IN	0.002	0.011	0.002	0.000	0.001	0.010	0.005	0.022
7440-31-5	50	SN	0.008	0.013	0.008	0.000	0.008	0.013	0.012	0.015
7440-36-0	51	SB	0.004	0.022	0.004	0.000	0.003	0.020	0.007	0.022
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.016	0.042	0.016	0.000	0.014	0.038	0.021	0.038
7439-91-0	57	LA	0.027	0.061	0.027	0.000	0.025	0.057	0.048	0.089
7440-45-1	58	CE	0.015	0.045	0.015	0.000	0.014	0.045	0.025	0.053
7439-97-6	80	HG	0.000	0.002	0.000	0.000	0.000	0.002	0.001	0.002
7439-92-1	82	PB	0.004	0.013	0.004	0.011	0.004	0.014	0.006	0.008
	200	TC	0.000	0.000	7.250	6.258	NE	6.049	0.000	0.000
	201	OC	29.735	7.373	23.235	4.438	15.935	7.750	29.917	0.620
	202	EC	2.634	1.824	1.647	0.571	0.907	1.744	2.661	0.176
	203	SO4	20.396	5.818	19.771	3.964	18.678	8.217	19.914	3.567
	204	NO3	0.374	0.190	0.187	0.102	0.060	0.208	0.384	0.065
		SUM =	79.801		77.463		53.957		79.734	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Industrial Manufacturing - Average

Profile Number:90016

Profile Data Quality:E

Control Device:Not Applicable

Reference(s):58

Data Source:Average profile developed from original profiles representing the source category group 3xxxxxxx.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.43	0.55	0.62

									Total Particulate	
	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
41-7	4	BE	0.001	0.003	0.001	0.000	0.000	0.002	0.000	0.000
-42-8	5	B	1.366	0.007	1.366	0.000	1.365	0.561	1.362	0.000
7782-41-4	9	F	0.472	0.936	0.440	0.267	0.384	0.771	0.523	0.555
7440-23-5	11	NA	2.316	1.961	2.199	0.552	1.749	2.217	1.778	1.504
7439-95-4	12	MG	0.273	0.617	0.254	0.559	0.250	0.553	0.254	0.000
7429-90-5	13	AL	2.167	1.171	2.384	0.952	1.784	1.310	1.905	0.298
7440-21-3	14	SI	5.071	1.618	5.505	2.828	3.574	3.000	4.544	0.535
7723-14-0	15	P	0.187	0.051	0.162	0.052	0.173	0.103	0.160	0.056
7704-34-9	16	S	4.887	1.599	4.202	1.153	4.369	1.992	4.549	1.191
7782-50-5	17	CL	3.485	0.664	3.040	0.944	2.755	1.525	3.401	0.451
7440-09-7	19	K	2.535	1.458	2.125	1.447	2.184	1.761	2.337	0.133
7440-70-2	20	CA	2.928	1.469	2.933	2.505	2.767	1.203	3.209	0.624
7440-20-2	21	SC	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-32-6	22	TI	0.081	0.065	0.078	0.133	0.075	0.083	0.074	0.011
7440-62-2	23	V	0.038	0.007	0.027	0.017	0.031	0.024	0.029	0.002
7440-47-3	24	CR	0.216	0.186	0.141	0.186	0.177	0.266	0.227	0.004
7439-96-5	25	MN	0.671	0.182	0.673	0.181	0.666	0.420	0.676	0.032
7439-89-6	26	FE	3.049	0.667	3.366	0.691	3.089	1.318	3.259	0.590
7440-48-4	27	CO	0.071	0.042	0.086	0.040	0.081	0.079	0.068	0.040
7440-02-0	28	NI	0.148	0.023	0.132	0.035	0.135	0.067	0.144	0.018
7440-50-8	29	CU	2.071	0.681	2.147	0.700	2.079	1.219	2.163	0.998
7440-66-6	30	ZN	3.319	0.669	3.451	0.699	3.322	1.456	3.342	1.178
7440-55-3	31	GA	0.001	0.002	0.001	0.007	0.001	0.003	0.001	0.002
7440-56-4	32	GE	0.000	0.001	0.000	0.000	NE	0.001	0.000	0.000
-38-2	33	AS	3.337	0.815	2.530	0.366	3.195	2.417	2.645	0.515

continued (profile=90016)

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7782-49-2	34	SE	0.056	0.004	0.052	0.003	0.055	0.025	0.054	0.017
7726-95-6	35	BR	0.052	0.038	0.045	0.044	0.048	0.043	0.045	0.026
7440-17-7	37	RB	0.014	0.003	0.014	0.001	0.014	0.007	0.014	0.002
7440-24-6	38	SR	0.017	0.009	0.020	0.014	0.017	0.015	0.021	0.013
7440-65-5	39	Y	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-67-7	40	ZR	0.002	0.004	0.003	0.008	0.002	0.007	0.003	0.004
7439-98-7	42	MO	0.001	0.003	0.007	0.005	0.005	0.003	0.008	0.003
7440-05-3	46	PD	0.101	0.048	0.027	0.013	0.089	0.074	0.042	0.019
7440-22-4	47	AG	0.063	0.049	0.046	0.033	0.059	0.054	0.050	0.052
7440-43-9	48	CD	0.959	0.399	0.653	0.306	0.880	0.590	0.753	0.340
7440-74-6	49	IN	0.006	0.013	0.008	0.004	0.006	0.007	0.009	0.015
7440-31-5	50	SN	0.216	0.049	0.198	0.070	0.214	0.127	0.198	0.062
7440-36-0	51	SB	1.705	0.600	1.811	1.005	1.815	0.932	1.843	0.435
7440-46-2	55	CS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-39-3	56	BA	0.067	0.128	0.055	0.112	0.056	0.114	0.058	0.097
7439-91-0	57	LA	0.009	0.023	0.016	0.046	0.004	0.046	0.012	0.033
7440-45-1	58	CE	0.012	0.017	0.012	0.000	0.012	0.018	0.013	0.020
7439-97-6	80	HG	0.019	0.007	0.015	0.007	0.018	0.011	0.014	0.006
7439-92-1	82	PB	5.063	1.567	4.656	1.670	4.939	2.624	4.927	1.617
7440-69-9	83	BI	0.018	0.133	0.018	0.000	0.014	0.102	0.000	0.000
	200	TC	0.544	0.000	1.554	2.344	0.539	2.278	0.561	0.000
	201	OC	7.359	3.057	6.082	1.718	4.838	3.283	7.315	0.472
	202	EC	0.894	1.860	0.967	2.023	0.421	2.448	1.162	0.374
	203	SO4	9.858	4.381	9.299	1.529	9.053	5.107	9.770	2.004
	204	SO3	0.297	0.507	0.235	0.502	0.208	0.522	0.291	0.091
	206	CO3	0.000	0.000	0.152	0.000	0.072	0.081	0.164	0.000
		SUM =	66.022		63.188		57.583		63.977	

a. Data as reported in Receptor Model Source Composition Library.
b. Calculated based on a methodology described in Source Composition Library.
c. Extrapolated/Estimated

Profile Name:Overall Average

Profile Number:00000

Profile Data Quality:E

Control Device:Not applicable.

Reference(s):63

Data Source:Profile based on average of all profiles.

SCC : NO-SCC

Mass Fraction Data :

Size interval (um) :	(0-2.5)	(0-6)	(0-10)
Mass Fraction :	0.39	0.48	0.55

	Species	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
CAS	No.		% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7439-93-2	3	LI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-41-7	4	BE	0.000	0.002	0.000	0.000	0.000	0.002	0.000	0.000
7440-42-8	5	B	0.586	0.016	0.585	0.010	0.586	0.366	0.582	0.010
7782-41-4	9	F	0.219	0.612	0.204	0.881	0.181	0.655	0.244	0.363
7440-23-5	11	NA	1.652	1.613	1.577	0.537	1.377	1.535	1.407	1.318
7439-95-4	12	MG	0.389	0.520	0.367	0.983	0.362	0.587	0.393	0.114
7429-90-5	13	AL	4.443	1.325	4.079	0.782	3.819	1.391	4.024	0.949
7440-21-3	14	SI	9.491	1.752	8.933	2.137	7.736	2.490	8.673	0.824
7723-14-0	15	P	0.152	0.050	0.140	0.108	0.141	0.110	0.247	0.043
7704-34-9	16	S	2.972	1.232	2.457	0.915	2.632	1.464	2.876	1.052
7782-50-5	17	CL	2.631	1.105	2.316	1.115	2.263	1.235	2.624	0.521
7440-09-7	19	K	2.108	1.470	1.760	0.984	1.843	1.385	2.036	0.907
7440-70-2	20	CA	2.614	1.072	2.804	1.662	2.399	0.915	2.945	0.487
7440-20-2	21	SC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-32-6	22	TI	0.194	0.066	0.207	0.098	0.186	0.082	0.206	0.018
7440-62-2	23	V	0.061	0.065	0.059	0.073	0.058	0.054	0.062	0.001
7440-47-3	24	CR	0.103	0.872	0.071	0.872	0.086	0.616	0.130	0.864
7439-96-5	25	MN	0.337	0.130	0.345	0.122	0.330	0.279	0.344	0.035
7439-89-6	26	FE	2.758	0.677	2.848	0.652	2.648	1.020	3.046	0.608
7440-48-4	27	CO	0.031	0.028	0.037	0.026	0.035	0.052	0.029	0.026
7440-02-0	28	NI	0.126	0.870	0.113	0.871	0.119	0.597	0.128	0.864
7440-50-8	29	CU	1.056	0.600	1.089	0.625	1.057	0.919	1.134	0.785
7440-66-6	30	ZN	2.233	1.119	2.235	0.733	2.218	1.481	2.392	1.307
7440-55-3	31	GA	0.002	0.864	0.002	0.006	0.002	0.418	0.002	0.864
7440-56-4	32	GE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

continued (profile=00000)

CAS	Species No.	Species	0-2.5 um(a)		2.5-10 um(a)		0-10 um(b)		Total Particulate Measured(a)	
			% wt.	Unc.	% wt.	Unc.	% wt	Unc.	% wt.	Unc.
7440-38-2	33	AS	1.476	1.034	1.118	0.307	1.410	1.646	1.175	0.964
7782-49-2	34	SE	0.025	0.864	0.023	0.003	0.025	0.418	0.029	0.864
7726-95-6	35	BR	0.353	0.894	0.332	0.201	0.346	0.555	0.356	0.868
7440-17-7	37	RB	0.007	0.002	0.008	0.001	0.007	0.004	0.008	0.001
7440-24-6	38	SR	0.014	0.010	0.017	0.014	0.014	0.015	0.017	0.014
7440-65-5	39	Y	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-67-7	40	ZR	0.002	0.003	0.004	0.008	0.002	0.006	0.003	0.003
74400-30-1	41	NB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-98-7	42	MO	0.002	0.002	0.007	0.007	0.006	0.005	0.008	0.003
7440-18-8	44	RU	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-16-6	45	RH	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-05-3	46	PD	0.045	0.032	0.013	0.008	0.040	0.048	0.020	0.012
7440-22-4	47	AG	0.039	0.052	0.031	0.034	0.037	0.053	0.033	0.057
7440-43-9	48	CD	0.421	0.261	0.285	0.200	0.385	0.385	0.377	0.222
7440-74-6	49	IN	0.004	0.014	0.004	0.003	0.003	0.007	0.004	0.010
7440-31-5	50	SN	0.117	0.041	0.103	0.049	0.114	0.089	0.162	0.067
7440-36-0	51	SB	0.765	0.995	0.806	0.723	0.809	0.813	0.828	0.991
13494-80-9	52	TE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7553-56-2	53	I	0.000	0.864	0.001	0.000	0.001	0.418	0.002	0.864
7440-46-2	55	CS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-39-3	56	BA	0.052	0.116	0.039	0.081	0.042	0.095	0.054	0.064
7439-91-0	57	LA	0.004	0.016	0.007	0.032	0.002	0.031	0.006	0.023
7440-45-1	58	CE	0.009	0.011	0.009	0.000	0.009	0.012	0.009	0.013
7440-10-0	59	PR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-00-8	60	ND	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-19-9	62	SM	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-53-1	63	EU	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-54-2	64	GD	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-27-9	65	TB	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000

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CAS	Species No.	Species	0-2.5 um(a) % wt.	0-2.5 um(a) Unc.	2.5-10 um(a) % wt.	2.5-10 um(a) Unc.	0-10 um(b) % wt	0-10 um(b) Unc.	Total Particulate Measured(a) % wt.	Total Particulate Measured(a) Unc.
7429-91-6	66	DY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-60-0	67	HO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-52-0	68	ER	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-30-4	69	TM	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-64-4	70	YB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-94-3	71	LU	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-58-6	72	HF	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-25-7	73	TA	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-33-7	74	W	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-15-5	75	RE	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-04-2	76	OS	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-88-5	77	IR	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-06-4	78	PT	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7440-57-5	79	AU	0.000	0.000	0.000	0.000	NE	0.000	0.000	0.000
7439-97-6	80	HG	0.054	0.864	0.052	0.005	0.054	0.422	0.052	1.176
7440-28-0	81	TL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7439-92-1	82	PB	3.382	1.739	3.137	1.632	3.303	2.315	3.495	1.811
7440-69-9	83	BI	0.008	0.086	0.008	0.000	0.006	0.066	0.000	0.000
7440-29-1	90	TH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7440-61-1	92	U	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	200	TC	2.117	3.714	2.546	4.016	2.085	5.052	2.124	3.714
	201	OC	8.768	3.137	8.187	2.634	7.337	4.481	8.321	0.857
	202	EC	4.406	2.335	4.582	2.592	3.259	3.761	3.957	1.299
	203	SO4	5.514	3.198	5.030	1.563	5.046	3.574	6.169	1.338
	204	NO3	0.164	0.378	0.134	0.365	0.124	0.397	0.162	0.138
	205	NH4	0.022	0.073	0.030	0.092	0.023	0.086	0.022	0.045
	206	CO3	1.171	0.000	1.235	0.000	0.909	0.297	1.240	0.000
		SUM =	63.099		59.976		55.476		62.157	

a. Data as reported in Receptor Model Source Composition Library.

b. Calculated based on a methodology described in Source Composition Library.

c. Extrapolated/Estimated

APPENDIX E
PM PROFILE ASSIGNMENTS

The activities where PM profiles are applied typically employ Source Classification Codes (SCC's) for point sources and area source codes from the National Emissions Data System (NEDS) to represent emission source categories. Ideally, each SCC or area source code would be characterized by an appropriate PM profile. However, there are a limited number of PM profiles that represent a relatively small number of source categories. To increase the usefulness of a given PM profile and to characterize those source categories for which there are no profiles, PM profile assignments are made using engineering judgement.

Table E-1 is a listing of all the SCC's with appropriate profile assignments. (Refer to "Criteria Pollutant Emission Factors for the 1985 NAPAP Emissions Inventory" [EPA-600/7-87-015] for descriptions of SCC's used in Table E-1.) Table E-2 is a listing of assignments for area sources. Area source codes in Table E-2 include a number of sources that were developed by the National Acid Precipitation Assessment Program (NAPAP). The additional source codes are those from 65 through 115 (see Table E-3 for descriptions of area source codes used in this document).

Tables E-1 and E-2 use the same format to present the profile assignments. The first column consists of the point or area source code; the second column contains the profile assigned to the code. In cases where the profile assignment is based on engineering judgement, the profile number is followed by an asterisk (*) to indicate that the profile was originally developed for another source category. In cases where several profiles and a composite profile are available for characterizing an SCC, the composite profile is used in the assignment. The user/reader may wish to evaluate the individual profiles that make up the composite to determine the most appropriate profile for his/her particular application.

TABLE E-1. POINT SOURCE PROFILE ASSIGNMENTS[a]

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SCC	PROFILE NUMBER	QUALITY
10100101	11201*	E
10100102	11201*	E
10100201	11201	D
10100202	11201*	C
10100203	11201*	E
10100204	11201*	D
10100205	11201*	D
10100212	11201*	D
10100217	11201*	D
10100221	11201*	E
10100222	11201*	D
10100223	11201*	E
10100224	11201*	D
10100225	11201*	D
10100226	11201*	D
10100301	11201*	E
10100302	11201*	D
10100303	11201*	E
10100304	11201*	D
10100306	11201*	D
10100401	11501	D
10100404	11501*	E
10100405	11501*	E
10100406	11501*	E
10100501	11501*	E
10100504	11501*	E
10100505	11501*	E
10100601	26101*	E
10100602	26101*	E
10100604	26101*	E
10100701	26101*	E
10100702	26101*	E
10100801	11201*	E
10100901	11801*	E
10100902	11801	D
10100903	11801*	E
10101001	26101*	E
10101002	26101*	E
10101101	11801*	E
10101201	17106*	E
10101301	17120*	E
10101302	13501*	D

[a] Profile Number denotes the profile assignments.

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
10200101	11201*	E
10200104	11201*	E
10200107	11201*	E
10200201	11201*	E
10200202	11201*	D
10200203	11201*	E
10200204	11201*	D
10200205	11201*	D
10200206	11201*	D
10200210	11201*	D
10200212	11201*	D
10200213	12201	D
10200217	11201*	D
10200219	11201*	D
10200221	11201*	E
10200222	11201*	D
10200223	11201*	E
10200224	11201*	D
10200225	11201*	D
10200226	11201*	D
10200229	11201*	D
10200301	11201*	E
10200302	11201*	D
10200303	11201*	E
10200304	11201*	D
10200306	11201*	D
10200307	11201*	D
10200401	13501*	D
10200402	13501*	D
10200403	13501*	D
10200404	13501*	D
10200405	13501*	D
10200501	13501*	D
10200502	13501*	D
10200503	13501*	D
10200504	13501*	D
10200505	13501*	D
10200601	26101*	E
10200602	26101*	E
10200603	26101*	E
10200604	26101*	E
10200701	26101*	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
10200704	26101*	E
10200707	26101*	E
10200710	26101*	E
10200799	26101*	E
10200802	11201*	E
10200804	11201*	E
10200901	12704*	E
10200902	12704	D
10200903	12704*	E
10200904	12704*	E
10200905	12704*	E
10200906	12704*	E
10200907	12704*	E
10201001	26101*	E
10201002	26101*	E
10201101	11801*	E
10201201	17106*	E
10201301	17120*	E
10201302	13501*	D
10201302	17120*	E
10201401	26101*	E
10201402	26101*	E
10201403	13501*	D
10201404	13501*	D
10300101	11201*	E
10300102	11201*	E
10300103	11201*	E
10300205	11201*	E
10300206	11201*	D
10300207	11201*	D
10300208	11201*	D
10300209	11201*	D
10300211	11201*	D
10300214	11201*	D
10300216	11201*	D
10300217	11201*	D
10300221	11201*	E
10300222	11201*	D
10300223	11201*	D
10300224	11201*	D
10300225	11201*	D
10300226	11201*	D

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
10300305	11201*	E
10300306	11201*	D
10300307	11201*	D
10300309	11201*	D
10300401	13501	C
10300402	13501*	D
10300403	13501*	D
10300404	13501*	D
10300501	13501*	D
10300502	13501*	D
10300503	43201*	E
10300504	13501*	D
10300601	26101*	E
10300602	26101*	E
10300603	26101*	E
10300701	26101*	E
10300799	26101*	E
10300901	12704*	E
10300902	12704*	E
10300903	12704*	E
10301001	26101*	E
10301002	26101*	E
10301201	17106*	E
10301301	17120*	E
10301302	13501*	D
10301303	17120*	E
10500102	11201*	D
10500105	13501*	D
10500106	26101*	E
10500110	26101*	E
10500202	11201*	D
10500205	13501*	D
10500206	26101*	E
10500209	12704*	E
10500210	26101*	E
20100101	34001*	E
20100102	34001*	E
20100201	34001*	E
20100202	34001*	E
20100702	34001*	E
20100901	34001*	E
20100902	34001*	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
20101001	34001*	E
20200101	34001*	E
20200102	34001*	E
20200103	34001*	E
20200104	34001*	E
20200201	34001*	E
20200202	34001*	E
20200203	34001*	E
20200204	34001*	E
20200301	34001*	E
20200401	34001*	E
20200402	34001*	E
20200403	34001*	E
20200501	34001*	E
20200901	34001*	E
20200902	34001*	E
20201001	34001*	E
20201002	34001*	E
20300101	34001*	E
20300102	34001*	E
20300201	34001	E
20300202	34001	E
20300301	34001*	E
20301001	34001*	E
20301002	34001*	E
20400101	34001	E
20400102	34001	E
20400201	34001*	E
20400301	34001*	E
20400302	34001*	E
20400401	34001*	E
20400402	34001*	E
28888801	34001*	E
28888802	34001*	E
28888803	34001*	E
30100101	90002	E
30100102	00000	E
30100103	00000	E
30100104	00000	E
30100105	90002	E
30100106	90002	E
30100107	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30100108	90002	E
30100109	90002	E
30100180	90002	E
30100199	90002	E
30100305	90002	E
30100306	90002	E
30100307	90002	E
30100308	00000	E
30100309	00000	E
30100399	90002	E
30100410	90002	E
30100501	90002	E
30100502	00000	E
30100503	90002	E
30100504	90002	E
30100506	90002	E
30100507	90002	E
30100508	90002	E
30100509	90002	E
30100599	90002	E
30100601	25302	E
30100603	25302*	E
30100604	25302*	E
30100605	90002	E
30100699	90002	E
30100799	00000	E
30100801	90002	E
30100802	90002	E
30100803	00000	E
30100804	00000	E
30100805	00000	E
30100899	90002	E
30100901	90002	E
30100902	90002	E
30100999	90002	E
30101011	90002	E
30101012	90002	E
30101013	90002	E
30101014	90002	E
30101015	90002	E
30101021	90002	E
30101022	90002	E

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SCC	PROFILE NUMBER	QUALITY
30101023	90002	E
30101030	90002	E
30101099	90002	E
30101101	90002	E
30101198	90002	E
30101199	90002	E
30101202	00000	E
30101203	90002	E
30101204	90002	E
30101205	90002	E
30101206	90002	E
30101299	90002	E
30101301	90002	E
30101302	90002	E
30101303	90002	E
30101304	90002	E
30101399	90002	E
30101401	90002	E
30101402	90002	E
30101499	90002	E
30101501	90002	E
30101502	90002	E
30101503	90002	E
30101505	90002	E
30101599	90002	E
30101601	00000	E
30101602	00000	E
30101603	00000	E
30101699	00000	E
30101702	90002	E
30101703	90002	E
30101704	90002	E
30101705	90002	E
30101706	90002	E
30101707	90002	E
30101708	90002	E
30101799	90002	E
30101801	90002	E
30101802	90002	E
30101803	90002	E
30101805	90002	E
30101807	90002	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30101808	90002	E
30101809	90002	E
30101810	90002	E
30101811	90002	E
30101812	90002	E
30101813	90002	E
30101814	90002	E
30101815	90002	E
30101816	90002	E
30101817	90002	E
30101818	90002	E
30101819	90002	E
30101820	90002	E
30101821	90002	E
30101822	90002	E
30101827	90002	E
30101832	90002	E
30101837	90002	E
30101838	90002	E
30101839	00000	E
30101840	00000	E
30101842	90002	E
30101847	90002	E
30101849	90002	E
30101852	90002	E
30101860	90002	E
30101861	90002	E
30101863	90002	E
30101864	90002	E
30101865	90002	E
30101866	90002	E
30101870	90002	E
30101871	90002	E
30101872	90002	E
30101880	90002	E
30101881	90002	E
30101882	90002	E
30101883	90002	E
30101884	90002	E
30101885	90002	E
30101890	90002	E
30101891	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30101892	90002	E
30101893	90002	E
30101894	90002	E
30101899	90002	E
30101901	90002	E
30101902	90002	E
30101904	90002	E
30101905	90002	E
30101906	90002	E
30101907	90002	E
30102001	00000	E
30102002	00000	E
30102003	00000	E
30102004	00000	E
30102005	90002	E
30102099	90002	E
30102101	00000	E
30102102	90002	E
30102103	90002	E
30102104	90002	E
30102105	90002	E
30102106	90002	E
30102107	90002	E
30102108	90002	E
30102110	27501*	E
30102111	90002	E
30102112	90002	E
30102113	90002	E
30102120	90002	E
30102199	90002	E
30102201	90002	E
30102301	90002	E
30102304	90002	E
30102306	90002	E
30102308	90002	E
30102310	90002	E
30102312	90002	E
30102314	90002	E
30102316	90002	E
30102318	90002	E
30102319	90002	E
30102320	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30102321	90002	E
30102322	90002	E
30102399	90002	E
30102401	90002	E
30102402	90002	E
30102405	90002	E
30102410	90002	E
30102414	90002	E
30102415	90002	E
30102416	90002	E
30102421	90002	E
30102422	90002	E
30102423	90002	E
30102424	90002	E
30102425	90002	E
30102426	90002	E
30102427	90002	E
30102499	90002	E
30102501	90002	E
30102505	90002	E
30102599	90002	E
30102601	90002	E
30102602	90002	E
30102608	90002	E
30102609	90002	E
30102610	90002	E
30102611	90002	E
30102612	90002	E
30102613	90002	E
30102614	90002	E
30102615	90002	E
30102616	90002	E
30102617	90002	E
30102625	90002	E
30102630	90002	E
30102699	90002	E
30102701	90002	E
30102704	90002	E
30102705	90002	E
30102706	90002	E
30102707	90002	E
30102708	90002	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30102709	90002	E
30102710	90002	E
30102711	90002	E
30102712	90002	E
30102713	90002	E
30102714	90002	E
30102717	90002	E
30102718	90002	E
30102720	90002	E
30102721	90002	E
30102722	90002	E
30102723	90002	E
30102724	90002	E
30102725	90002	E
30102727	90002	E
30102728	90002	E
30102729	90002	E
30102730	90002	E
30102801	90002	E
30102803	90002	E
30102804	90002	E
30102805	90002	E
30102806	90002	E
30102807	90002	E
30102820	90002	E
30102821	90002	E
30102822	90002	E
30102823	90002	E
30102824	90002	E
30102825	90002	E
30102903	90002	E
30102904	90002	E
30102905	90002	E
30102906	90002	E
30102907	90002	E
30102908	90002	E
30102920	90002	E
30102921	90002	E
30102922	90002	E
30102923	90002	E
30102924	90002	E
30102925	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30103001	90002	E
30103002	90002	E
30103003	90002	E
30103004	90002	E
30103020	90002	E
30103021	90002	E
30103022	90002	E
30103023	90002	E
30103024	90002	E
30103025	90002	E
30103099	90002	E
30103101	90002	E
30103102	90002	E
30103103	90002	E
30103104	90002	E
30103105	90002	E
30103199	90002	E
30103201	90002	E
30103202	90002	E
30103203	90002	E
30103204	90002	E
30103299	90002	E
30103301	90002	E
30103311	90002	E
30103312	90002	E
30103399	90002	E
30103402	90002	E
30103403	90002	E
30103404	90002	E
30103405	90002	E
30103406	90002	E
30103410	90002	E
30103411	90002	E
30103412	90002	E
30103414	90002	E
30103415	90002	E
30103420	90002	E
30103425	90002	E
30103430	90002	E
30103435	90002	E
30103499	90002	E
30103501	90002	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30103502	90002	E
30103503	90002	E
30103506	90002	E
30103507	90002	E
30103510	90002	E
30103515	90002	E
30103520	90002	E
30103550	90002	E
30103551	90002	E
30103552	90002	E
30103553	90002	E
30103554	90002	E
30103599	90002	E
30103801	90002	E
30103901	90002	E
30103902	90002	E
30103903	90002	E
30104001	25404	E
30104002	25404*	E
30104003	25404*	E
30104004	25404*	E
30104005	25404*	E
30104006	25404*	E
30104007	25404*	E
30104008	25404*	E
30104009	25404*	E
30104010	25404*	E
30104011	25404*	E
30104012	25404*	E
30104013	25404*	E
30104101	00000	E
30104102	00000	E
30104103	00000	E
30104104	00000	E
30104199	00000	E
30104201	90002	E
30104202	90002	E
30104203	90002	E
30104204	90002	E
30104301	90002	E
30104501	90002	E
30105001	25403*	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30106001	90002	E
30106002	90002	E
30106003	90002	E
30106004	90002	E
30106005	90002	E
30106006	90002	E
30106007	90002	E
30106008	90002	E
30106009	90002	E
30106010	90002	E
30106011	90002	E
30106012	90002	E
30106099	90002	E
30107001	90002	E
30107002	90002	E
30109101	90002	E
30109105	90002	E
30109110	90002	E
30109151	90002	E
30109152	90002	E
30109153	90002	E
30109154	90002	E
30109180	90002	E
30109199	90002	E
30110002	90002	E
30110003	90002	E
30110004	90002	E
30110005	90002	E
30110099	90002	E
30111103	90002	E
30111199	90002	E
30111201	00000	E
30111202	00000	E
30111299	25407	E
30112001	90002	E
30112002	90002	E
30112005	90002	E
30112006	90002	E
30112007	90002	E
30112011	90002	E
30112012	90002	E
30112013	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30112014	90002	E
30112017	90002	E
30112021	90002	E
30112031	90002	E
30112032	90002	E
30112033	90002	E
30112034	90002	E
30112037	90002	E
30112099	90002	E
30112199	90002	E
30112401	90002	E
30112402	90002	E
30112403	90002	E
30112404	90002	E
30112405	90002	E
30112406	90002	E
30112407	90002	E
30112480	90002	E
30112501	90002	E
30112502	90002	E
30112504	90002	E
30112505	90002	E
30112506	90002	E
30112509	90002	E
30112510	90002	E
30112511	90002	E
30112512	90002	E
30112514	90002	E
30112515	90002	E
30112520	90002	E
30112521	90002	E
30112522	90002	E
30112524	90002	E
30112525	90002	E
30112526	90002	E
30112527	90002	E
30112528	90002	E
30112529	90002	E
30112530	90002	E
30112531	90002	E
30112532	90002	E
30112533	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30112534	90002	E
30112535	90002	E
30112540	90002	E
30112541	90002	E
30112542	90002	E
30112543	90002	E
30112544	90002	E
30112545	90002	E
30112546	90002	E
30112547	90002	E
30112550	90002	E
30112551	90002	E
30112552	90002	E
30112553	90002	E
30112555	90002	E
30112599	90002	E
30112699	90002	E
30112701	90002	E
30112702	90002	E
30112703	90002	E
30112720	90002	E
30112730	90002	E
30112740	90002	E
30112780	90002	E
30113004	90002	E
30113005	90002	E
30113201	90002	E
30113205	90002	E
30113210	90002	E
30113221	90002	E
30113222	90002	E
30113223	90002	E
30113224	90002	E
30113227	90002	E
30113299	90002	E
30113301	90002	E
30113302	90002	E
30113303	90002	E
30113380	90002	E
30113701	90002	E
30113710	90002	E
30113799	90002	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30114001	90002	E
30114002	90002	E
30114003	90002	E
30114004	90002	E
30114005	90002	E
30115201	90002	E
30115301	90002	E
30115310	90002	E
30115311	90002	E
30115312	90002	E
30115320	90002	E
30115321	90002	E
30115322	90002	E
30115380	90002	E
30115601	90002	E
30115602	90002	E
30115603	90002	E
30115604	90002	E
30115605	90002	E
30115606	90002	E
30115607	90002	E
30115680	90002	E
30115701	90002	E
30115702	90002	E
30115704	90002	E
30115780	90002	E
30115801	90002	E
30115802	90002	E
30115803	90002	E
30115821	90002	E
30115822	90002	E
30115880	90002	E
30116701	90002	E
30116702	90002	E
30116703	90002	E
30116704	90002	E
30116780	90002	E
30116799	90002	E
30116901	90002	E
30116902	90002	E
30116903	90002	E
30116904	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30116905	90002	E
30116906	90002	E
30116980	90002	E
30117401	90002	E
30117402	90002	E
30117410	90002	E
30117411	90002	E
30117421	90002	E
30117480	90002	E
30117601	90002	E
30117610	90002	E
30117611	90002	E
30117612	90002	E
30117613	90002	E
30117614	90002	E
30117615	90002	E
30117616	90002	E
30117617	90002	E
30117618	90002	E
30117630	90002	E
30117631	90002	E
30117632	90002	E
30117633	90002	E
30117634	90002	E
30117680	90002	E
30118101	90002	E
30118102	90002	E
30118103	90002	E
30118104	90002	E
30118105	90002	E
30118106	90002	E
30118107	90002	E
30118108	90002	E
30118109	90002	E
30118110	90002	E
30118180	90002	E
30119001	90002	E
30119002	90002	E
30119003	90002	E
30119004	90002	E
30119010	90002	E
30119011	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30119012	90002	E
30119013	90002	E
30119014	90002	E
30119080	90002	E
30119501	90002	E
30119502	90002	E
30119503	90002	E
30119504	90002	E
30119505	90002	E
30119506	90002	E
30119580	90002	E
30119701	90002	E
30119705	90002	E
30119706	90002	E
30119707	90002	E
30119708	90002	E
30119709	90002	E
30119710	90002	E
30119741	90002	E
30119742	90002	E
30119743	90002	E
30119744	90002	E
30119745	90002	E
30119749	90002	E
30119799	90002	E
30120201	90002	E
30120202	90002	E
30120203	90002	E
30120204	90002	E
30120205	90002	E
30120206	90002	E
30120210	90002	E
30120211	90002	E
30120280	90002	E
30120501	90002	E
30120502	90002	E
30120503	90002	E
30120504	90002	E
30120505	90002	E
30120506	90002	E
30120507	90002	E
30120508	90002	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30120509	90002	E
30120520	90002	E
30120521	90002	E
30120522	90002	E
30120523	90002	E
30120524	90002	E
30120525	90002	E
30120526	90002	E
30120527	90002	E
30120528	90002	E
30120529	90002	E
30120530	90002	E
30120531	90002	E
30120532	90002	E
30120540	90002	E
30120541	90002	E
30120542	90002	E
30120543	90002	E
30120544	90002	E
30120545	90002	E
30120546	90002	E
30120547	90002	E
30120548	90002	E
30120549	90002	E
30120550	90002	E
30120551	90002	E
30120552	90002	E
30120553	90002	E
30120554	90002	E
30120555	90002	E
30120580	90002	E
30120601	90002	E
30120602	90002	E
30120603	90002	E
30120680	90002	E
30121001	90002	E
30121002	90002	E
30121003	90002	E
30121004	90002	E
30121005	90002	E
30121006	90002	E
30121007	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30121008	90002	E
30121009	90002	E
30121010	90002	E
30121080	90002	E
30121101	90002	E
30121102	90002	E
30121103	90002	E
30121104	90002	E
30121121	90002	E
30121122	90002	E
30121123	90002	E
30121124	90002	E
30121125	90002	E
30121180	90002	E
30125001	90002	E
30125002	90002	E
30125003	90002	E
30125004	90002	E
30125005	90002	E
30125010	90002	E
30125015	90002	E
30125020	90002	E
30125021	90002	E
30125025	90002	E
30125099	90002	E
30125101	90002	E
30125102	90002	E
30125103	90002	E
30125104	90002	E
30125180	90002	E
30125201	90002	E
30125301	90002	E
30125302	90002	E
30125305	90002	E
30125306	90002	E
30125315	90002	E
30125316	90002	E
30125325	90002	E
30125326	90002	E
30125380	90002	E
30125401	90002	E
30125405	90002	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30125406	90002	E
30125407	90002	E
30125408	90002	E
30125409	90002	E
30125410	90002	E
30125411	90002	E
30125412	90002	E
30125413	90002	E
30125415	90002	E
30125416	90002	E
30125417	90002	E
30125418	90002	E
30125420	90002	E
30125499	90002	E
30125801	90002	E
30125802	90002	E
30125803	90002	E
30125805	90002	E
30125806	90002	E
30125807	90002	E
30125810	90002	E
30125815	90002	E
30125816	90002	E
30125817	90002	E
30125880	90002	E
30125899	90002	E
30130101	90002	E
30130102	90002	E
30130103	90002	E
30130104	90002	E
30130105	90002	E
30130106	90002	E
30130107	90002	E
30130108	90002	E
30130110	90002	E
30130135	90002	E
30130180	90002	E
30130201	90002	E
30130202	90002	E
30130203	90002	E
30130280	90002	E
30130301	90002	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30130302	90002	E
30130303	90002	E
30130304	90002	E
30130305	90002	E
30130380	90002	E
30130401	90002	E
30130402	90002	E
30130403	90002	E
30130404	90002	E
30130405	90002	E
30130480	90002	E
30130501	90002	E
30130502	90002	E
30130503	90002	E
30130504	90002	E
30130505	90002	E
30130580	90002	E
30180001	90002	E
30181001	90002	E
30182001	90002	E
30183001	90002	E
30184001	90002	E
30187001	90002	E
30187002	90002	E
30187003	90002	E
30187004	90002	E
30187005	90002	E
30187006	90002	E
30187007	90002	E
30187008	90002	E
30187009	90002	E
30187010	90002	E
30187097	90002	E
30187098	90002	E
30187501	90002	E
30187502	90002	E
30187597	90002	E
30187598	90002	E
30188501	90002	E
30188502	90002	E
30188503	90002	E
30188504	90002	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30188505	90002	E
30188599	90002	E
30188801	90002	E
30188802	90002	E
30188803	90002	E
30188804	90002	E
30188805	90002	E
30190001	90002	E
30190001	90002	E
30190002	13501*	D
30190003	90002	E
30190004	90002	E
30190012	13501*	D
30190013	90002	E
30190014	90002	E
30190099	90002	E
30199998	25405	E
30199999	25405	E
30200101	90003	E
30200102	90003	E
30200103	90003	E
30200104	90003	E
30200199	90003	E
30200201	90003	E
30200202	90003	E
30200203	90003	E
30200299	90003	E
30200301	90003	E
30200401	90003	E
30200402	90003	E
30200403	90003	E
30200404	90003	E
30200410	90003	E
30200501	21401*	E
30200502	21401*	E
30200503	21401*	E
30200504	21401*	E
30200505	21401	E
30200506	21401	E
30200507	21401*	E
30200508	21401*	E
30200509	21401*	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30200510	21401*	E
30200511	21401*	E
30200512	21401*	E
30200601	21401*	E
30200602	21401*	E
30200603	21401*	E
30200604	21401*	E
30200605	21401*	E
30200606	21401*	E
30200607	21401*	E
30200608	21401*	E
30200609	21401*	E
30200610	21401*	E
30200611	21401*	E
30200699	21401*	E
30200701	90003	E
30200702	90003	E
30200703	90003	E
30200704	90003	E
30200705	90003	E
30200711	90003	E
30200712	90003	E
30200713	90003	E
30200714	90003	E
30200721	90003	E
30200722	90003	E
30200723	90003	E
30200724	90003	E
30200731	90003	E
30200732	90003	E
30200733	90003	E
30200734	90003	E
30200741	90003	E
30200742	90003	E
30200743	90003	E
30200744	90003	E
30200745	90003	E
30200751	90003	E
30200752	90003	E
30200753	90003	E
30200754	90003	E
30200755	90003	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30200756	90003	E
30200760	90003	E
30200771	90003	E
30200772	90003	E
30200773	90003	E
30200774	90003	E
30200781	90003	E
30200782	90003	E
30200783	90003	E
30200784	90003	E
30200785	90003	E
30200786	90003	E
30200787	90003	E
30200788	90003	E
30200789	90003	E
30200790	90003	E
30200791	90003	E
30200799	90003	E
30200801	90003	E
30200802	90003	E
30200803	90003	E
30200804	90003	E
30200805	90003	E
30200806	90003	E
30200899	90003	E
30200901	90003	E
30200902	90003	E
30200903	90003	E
30200904	00000	E
30200905	90003	E
30200998	90003	E
30200999	90003	E
30201001	90003	E
30201002	90003	E
30201003	00000	E
30201004	90003	E
30201103	00000	E
30201104	90003	E
30201105	90003	E
30201106	90003	E
30201199	00000	E
30201201	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30201202	00000	E
30201203	90003	E
30201204	00000	E
30201205	90003	E
30201206	90003	E
30201301	90003	E
30201401	90003	E
30201501	90003	E
30201599	90003	E
30201601	90003	E
30201699	90003	E
30201799	90003	E
30201899	90003	E
30201901	90003	E
30201902	90003	E
30201903	90003	E
30201904	90003	E
30201906	90003	E
30201907	90003	E
30201908	90003	E
30201909	90003	E
30201911	90003	E
30201912	90003	E
30201913	90003	E
30201914	90003	E
30201915	00000	E
30201916	90003	E
30201917	90003	E
30201918	90003	E
30201919	90003	E
30201920	00000	E
30201999	90003	E
30202001	41350*	E
30202002	41350*	E
30202101	90003	E
30202102	90003	E
30202105	90003	E
30202106	90003	E
30202201	90003	E
30202601	90003	E
30202801	90003	E
30203001	90003	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30203099	90003	E
30203103	90003	E
30203104	90003	E
30203105	90003	E
30203106	90003	E
30203107	90003	E
30203108	90003	E
30203109	90003	E
30203110	90003	E
30203111	90003	E
30203201	00000	E
30203202	00000	E
30203299	00000	E
30203399	90003	E
30203601	90003	E
30203801	90003	E
30288801	90003	E
30288802	90003	E
30288803	90003	E
30288804	90003	E
30288805	90003	E
30290001	13501*	D
30290002	13501*	D
30290003	26101*	E
30299998	90003	E
30299999	90003	E
30300001	90007	E
30300002	90007	E
30300101	29101*	E
30300101	29102*	E
30300102	29101*	E
30300102	29102*	E
30300103	29101*	E
30300103	29102*	E
30300104	29101*	E
30300104	29102*	E
30300105	29101*	E
30300105	29102*	E
30300106	29101*	E
30300106	29102*	E
30300107	29101	D
30300107	29102	D

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30300108	29101*	E
30300108	29102*	E
30300109	29101*	E
30300109	29102*	E
30300110	29101*	E
30300110	29102*	E
30300111	29101*	E
30300111	29102*	E
30300199	29102*	E
30300199	29101*	E
30300201	90007	E
30300302	21204*	D
30300303	21203*	E
30300304	21203*	E
30300305	21204*	D
30300306	11201*	D
30300307	21204*	E
30300308	21203*	E
30300309	21204*	D
30300310	21204*	D
30300311	21204*	D
30300312	21203*	E
30300313	11202*	E
30300314	21203*	E
30300315	90007	E
30300316	21204*	D
30300399	21204*	E
30300401	21203*	E
30300502	29202*	E
30300503	29202	E
30300504	29202*	E
30300505	29202*	E
30300506	29202*	E
30300507	29202*	E
30300508	29202*	E
30300509	29202*	E
30300510	29202*	E
30300511	29202*	E
30300512	29202*	E
30300513	29202*	E
30300514	29202*	E
30300515	29202*	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30300516	29202*	E
30300517	29202*	E
30300518	29202*	E
30300521	29202*	E
30300522	29202*	E
30300523	29202*	E
30300524	29202*	E
30300525	29202*	E
30300526	29202*	E
30300527	29202*	E
30300528	29202*	E
30300599	29202*	E
30300601	28401*	D
30300602	28401*	D
30300603	28401*	D
30300604	28401*	D
30300605	28401*	D
30300610	28401*	D
30300611	28401*	D
30300613	28401*	D
30300614	28401*	D
30300615	28401*	D
30300616	28401*	D
30300617	28401*	D
30300699	28401*	D
30300701	28401	C
30300702	28401*	D
30300703	28401*	D
30300704	28401*	E
30300801	28301*	E
30300802	28301*	E
30300804	28301*	E
30300805	28301*	E
30300808	28301*	E
30300809	28301*	E
30300811	28301*	E
30300812	28301*	E
30300813	28301	D
30300814	28301*	E
30300815	28301*	E
30300816	28301*	E
30300817	28301*	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30300818	28301*	E
30300819	28301*	E
30300820	28301*	E
30300821	28301*	E
30300822	28301*	E
30300823	28301*	E
30300824	28301*	E
30300825	28301*	E
30300826	28301*	E
30300827	28301*	E
30300831	41220*	E
30300832	41220*	E
30300833	41220*	E
30300834	41130*	E
30300899	90007	E
30300901	28302	E
30300904	90004	E
30300906	90004	E
30300907	90004	E
30300908	90004	E
30300910	90004	E
30300911	90004	E
30300912	90004	E
30300913	28303	E
30300914	28303*	E
30300915	90004	E
30300916	28303*	E
30300917	28303*	E
30300918	28302*	E
30300919	28302*	E
30300921	90004	E
30300922	90004	E
30300923	90004	E
30300924	90004	E
30300925	90004	E
30300931	90004	E
30300932	90004	E
30300933	90004	E
30300934	90004	E
30300935	90004	E
30300936	90004	E
30300998	90004	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30300999	90004	E
30301001	29304	C
30301002	29302	C
30301002	29305	C
30301003	29307	C
30301004	21150	D
30301005	21150	D
30301006	90005	E
30301007	90005	E
30301008	29330	C
30301009	21205	E
30301010	90005	E
30301011	21150	D
30301012	21150	D
30301013	21150	D
30301014	21150	D
30301015	90005	E
30301016	90005	E
30301017	90005	E
30301018	90005	E
30301019	90005	E
30301020	90005	E
30301021	29301	E
30301022	90005	E
30301023	90005	E
30301024	90005	E
30301025	29309	C
30301026	90005	E
30301099	90005	E
30301101	90016	E
30301102	90016	E
30301199	90016	E
30301201	90016	E
30301202	90016	E
30301299	90016	E
30301301	90016	E
30301401	90016	E
30301402	90016	E
30301403	90016	E
30301499	90016	E
30302301	90016	E
30302302	90016	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30302303	90016	E
30302304	90016	E
30302305	90016	E
30302306	90016	E
30302307	90016	E
30302308	90016	E
30302309	90016	E
30302310	90016	E
30302311	90016	E
30302312	90016	E
30302313	90016	E
30302314	90016	E
30302315	90016	E
30302316	90016	E
30302321	90016	E
30302322	90016	E
30302401	21320	E
30302402	90006	E
30302403	90006	E
30302404	21340	E
30302405	90006	E
30302406	90006	E
30302407	90006	E
30302408	90006	E
30302409	90006	E
30302410	90006	E
30302411	90006	E
30303002	90007	E
30303003	90007	E
30303005	90007	E
30303006	90007	E
30303007	90007	E
30303008	90007	E
30303009	90007	E
30303010	90007	E
30303011	90007	E
30303012	90007	E
30303014	90007	E
30303015	90007	E
30303016	90007	E
30303099	90007	E
30388801	90007	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30388802	90007	E
30388803	90007	E
30388804	90007	E
30388805	90007	E
30390001	13501*	D
30390002	13501*	D
30390003	26101*	E
30390004	26101*	E
30390011	13501*	D
30390012	13501*	D
30390013	26101*	E
30390014	26101*	E
30390023	26101*	E
30390024	26101*	E
30399999	21501	D
30400101	90009	E
30400102	90009	E
30400103	20101	E
30400104	90009	E
30400105	90009	E
30400106	90009	E
30400107	20102	D
30400108	90009	E
30400109	90009	E
30400110	90009	E
30400111	90009	E
30400112	90009	E
30400113	90009	E
30400114	90009	E
30400120	90009	E
30400150	90009	E
30400199	90009	E
30400204	28201*	E
30400207	19101*	E
30400208	19101	E
30400209	19101*	E
30400210	19101*	E
30400211	19101*	E
30400212	19101*	E
30400214	19101*	E
30400215	19101*	E
30400217	19101*	E

SCC	PROFILE NUMBER	QUALITY
30400219	19101*	E
30400220	19101*	E
30400221	19101*	E
30400223	19101*	E
30400224	19101*	E
30400230	19101*	E
30400231	19101*	E
30400232	19101*	E
30400233	19101*	E
30400234	19101*	E
30400235	19101*	E
30400236	19101*	E
30400237	19101*	E
30400238	19101*	E
30400239	19101*	E
30400299	20502	D
30400301	28202	D
30400302	90010	E
30400303	28201	E
30400304	90010	E
30400305	90010	E
30400310	90010	E
30400315	90010	E
30400320	90010	E
30400325	90010	E
30400330	90010	E
30400331	90010	E
30400332	90010	E
30400333	90010	E
30400340	90010	E
30400341	90010	E
30400342	90010	E
30400350	90010	E
30400351	90010	E
30400352	90010	E
30400353	90010	E
30400354	90010	E
30400355	90010	E
30400356	90010	E
30400357	90010	E
30400358	90010	E
30400360	90010	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30400370	90010	E
30400371	90010	E
30400398	90010	E
30400399	90010	E
30400401	20401*	E
30400402	20401*	E
30400403	20401	E
30400404	20401*	E
30400405	20401*	E
30400406	20401*	E
30400407	20401*	E
30400408	20401*	E
30400409	20401*	E
30400410	20401*	E
30400411	20401*	E
30400412	20401*	E
30400413	20401*	E
30400414	20401*	E
30400499	20401*	E
30400501	90008	E
30400505	90008	E
30400506	90008	E
30400507	90008	E
30400508	90008	E
30400509	90008	E
30400510	90008	E
30400511	90008	E
30400512	90008	E
30400513	90008	E
30400521	90008	E
30400522	90008	E
30400523	90008	E
30400524	90008	E
30400525	90008	E
30400526	90008	E
30400527	90008	E
30400528	90008	E
30400599	90008	E
30400601	90008	E
30400699	90008	E
30400701	28304	D
30400702	90011	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30400703	90011	E
30400704	28601	E
30400705	90011	E
30400706	90011	E
30400707	90011	E
30400708	90011	E
30400709	90011	E
30400710	90011	E
30400711	90011	E
30400712	90011	E
30400713	90011	E
30400714	90011	E
30400715	90011	E
30400716	90011	E
30400717	90011	E
30400718	90011	E
30400720	90011	E
30400721	90011	E
30400722	90011	E
30400723	90011	E
30400724	90011	E
30400725	90011	E
30400726	90011	E
30400730	90011	E
30400731	90011	E
30400799	90011	E
30400801	90008	E
30400802	90008	E
30400803	90008	E
30400805	90008	E
30400806	90008	E
30400807	90008	E
30400809	90008	E
30400810	90008	E
30400811	90008	E
30400812	90008	E
30400814	00000	E
30400818	00000	E
30400824	90008	E
30400828	90008	E
30400834	90008	E
30400838	90008	E

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SCC	PROFILE NUMBER	QUALITY
30400840	90008	E
30400841	90008	E
30400842	90008	E
30400843	90008	E
30400851	90008	E
30400852	90008	E
30400853	90008	E
30400854	90008	E
30400855	90008	E
30400861	90008	E
30400862	90008	E
30400863	90008	E
30400864	90008	E
30400865	90008	E
30400866	90008	E
30400867	90008	E
30400868	90008	E
30400869	90008	E
30400870	90008	E
30400871	90008	E
30400872	90008	E
30400873	90008	E
30400874	90008	E
30400875	90008	E
30400876	90008	E
30400877	90008	E
30400899	20501	E
30400901	90008	E
30400999	90008	E
30401001	90008	E
30401002	90008	E
30401004	90008	E
30401005	90008	E
30401006	90008	E
30401007	90008	E
30401008	90008	E
30401010	90008	E
30401011	90008	E
30401099	90008	E
30402001	90008	E
30402002	90008	E
30402003	90008	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30402004	90008	E
30402099	90008	E
30402201	90008	E
30402210	90008	E
30404001	90008	E
30404901	90008	E
30405001	90008	E
30405099	90008	E
30488801	90008	E
30488802	90008	E
30488803	90008	E
30488804	90008	E
30488805	90008	E
30490001	13501*	D
30490002	13501*	D
30490003	26101*	E
30490004	26101*	E
30490011	13501*	D
30490012	13501*	D
30490013	26101*	E
30490014	26101*	E
30490023	26101*	E
30490024	26101*	E
30499999	29203	E
30500101	25402*	E
30500102	25402	D
30500103	25402*	E
30500104	25402*	E
30500105	25402*	E
30500110	25402*	E
30500111	25402*	E
30500112	25402*	E
30500113	25402*	E
30500198	25402*	E
30500199	25402*	E
30500201	90013	E
30500202	90013	E
30500203	90013	E
30500204	90013	E
30500205	90013	E
30500206	26101*	E
30500207	13501*	D

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30500208	13501*	D
30500299	90013*	E
30500301	90013	E
30500302	90013	E
30500303	90013	E
30500304	26101*	E
30500307	90013	E
30500308	90013	E
30500309	90013	E
30500311	90013	E
30500312	90013	E
30500313	90013	E
30500314	90013	E
30500315	90013	E
30500316	90013	E
30500398	90013	E
30500399	90013	E
30500401	90013	E
30500402	90013	E
30500403	90013	E
30500404	90013	E
30500405	90013	E
30500406	90013	E
30500499	90013	E
30500501	90013	E
30500502	90013	E
30500503	90013	E
30500504	90013	E
30500505	90013	E
30500598	90013	E
30500599	90013	E
30500606	27201	E
30500607	27201*	E
30500608	27201*	E
30500609	27201*	E
30500610	27201*	E
30500611	27201*	E
30500612	27201*	E
30500613	27201*	E
30500614	27201*	E
30500615	27201*	E
30500616	27201*	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30500617	27201*	E
30500618	27201*	E
30500619	27201*	E
30500699	27201*	E
30500706	27203	D
30500707	27203*	E
30500708	27203*	E
30500709	27203*	E
30500710	27203*	E
30500711	27203*	E
30500712	27203*	E
30500714	27203*	E
30500715	27203*	E
30500716	27203*	E
30500717	27203*	E
30500718	27203*	E
30500719	27203*	E
30500799	27203*	E
30500801	90013	E
30500802	90013	E
30500803	90013	E
30500899	90013	E
30500901	90012	E
30500902	90012	E
30500903	90012	E
30500904	90012	E
30500905	90012	E
30500906	90012	E
30500907	90012	E
30500908	90012	E
30500909	90012	E
30500910	90012	E
30500999	25201	E
30500999	25406	D
30501001	90013	E
30501002	90013	E
30501003	90013	E
30501004	90013	E
30501005	90013	E
30501006	90013	E
30501007	90013	E
30501008	90013	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30501009	90013	E
30501010	90013	E
30501011	90013	E
30501012	90013	E
30501013	90013	E
30501014	90013	E
30501015	90013	E
30501016	90013	E
30501017	90013	E
30501021	90013	E
30501022	90013	E
30501023	90013	E
30501024	90013	E
30501030	90013	E
30501031	90013	E
30501032	90013	E
30501033	90013	E
30501034	90013	E
30501035	90013	E
30501036	90013	E
30501037	90013	E
30501038	90013	E
30501039	90013	E
30501040	90013	E
30501041	90013	E
30501042	90013	E
30501043	90013	E
30501044	90013	E
30501045	90013	E
30501046	90013	E
30501047	90013	E
30501048	90013	E
30501049	90013	E
30501050	90013	E
30501090	90013	E
30501099	90013	E
30501101	90013	E
30501106	90013	E
30501107	90013	E
30501108	90013	E
30501109	90013	E
30501110	90013	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30501111	90013	E
30501112	90013	E
30501113	90013	E
30501114	90013	E
30501115	90013	E
30501120	90013	E
30501199	90013	E
30501201	90013	E
30501202	90013	E
30501203	90013	E
30501204	90013	E
30501205	90013	E
30501206	90013	E
30501207	90013	E
30501208	90013	E
30501209	90013	E
30501211	90013	E
30501212	90013	E
30501213	90013	E
30501214	90013	E
30501215	90013	E
30501221	90013	E
30501222	90013	E
30501223	90013	E
30501224	90013	E
30501299	90013	E
30501301	90013	E
30501399	90013	E
30501401	27102*	E
30501402	27102	D
30501403	27102*	E
30501404	27102*	E
30501406	00000	E
30501407	00000	E
30501408	00000	E
30501410	00000	E
30501411	27102*	E
30501412	00000	E
30501413	27102*	E
30501414	27102*	E
30501415	27102*	E
30501499	27102*	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30501501	27501	E
30501502	27501*	E
30501503	27501*	E
30501504	27501*	E
30501505	27501*	E
30501506	27501*	E
30501507	27501*	E
30501508	27501*	E
30501509	27501*	E
30501510	27501*	E
30501511	27501*	E
30501512	27501*	E
30501513	27501*	E
30501514	27501*	E
30501515	27501*	E
30501516	27501*	E
30501517	27501*	E
30501518	27501*	E
30501519	27501*	E
30501520	27501	E
30501521	27501*	E
30501522	27501*	E
30501599	27501*	E
30501601	90013	E
30501602	90013	E
30501603	90013	E
30501604	90013	E
30501605	90013	E
30501606	90013	E
30501607	90013	E
30501608	90013	E
30501609	90013	E
30501610	90013	E
30501611	90013	E
30501612	90013	E
30501613	90013	E
30501614	90013	E
30501615	90013	E
30501616	90013	E
30501617	90013	E
30501699	90013	E
30501701	90013	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30501702	90013	E
30501703	90013	E
30501704	90013	E
30501705	90013	E
30501799	90013	E
30501801	90013	E
30501899	90013	E
30501901	90013	E
30501902	90013	E
30501903	90013	E
30501904	90013	E
30501905	90013	E
30501999	90013	E
30502001	21101*	D
30502002	21101*	D
30502003	21101*	D
30502004	21101*	D
30502005	21101	C
30502006	21101*	D
30502007	21101*	D
30502008	21101*	D
30502009	21101*	D
30502010	21101*	D
30502011	21101*	D
30502012	21101*	D
30502013	21101*	D
30502014	21101*	D
30502015	21101*	D
30502016	21101*	D
30502020	21101*	D
30502099	21101*	D
30502101	90013	E
30502102	90013	E
30502103	90013	E
30502104	90013	E
30502105	90013	E
30502106	90013	E
30502201	90013	E
30502299	90013	E
30502401	90013	E
30502499	90013	E
30502501	21101*	D

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30502502	21101*	D
30502503	21101*	D
30502504	21101*	D
30502505	21101*	D
30502506	21101*	D
30502507	21101*	D
30502508	21101*	D
30502509	21101*	D
30502510	21101*	D
30502511	21101*	D
30502601	90013	E
30502699	90013	E
30503099	90013	E
30503101	90013	E
30503102	90013	E
30503103	90013	E
30503104	90013	E
30503105	90013	E
30503106	90013	E
30503107	90013	E
30503108	90013	E
30503109	90013	E
30503110	90013	E
30503111	90013	E
30503199	90013	E
30503201	90013	E
30503202	90013	E
30503203	90013	E
30503204	90013	E
30503205	90013	E
30503206	90013	E
30503299	90013	E
30503301	90013	E
30504001	90013	E
30504002	90013	E
30504003	90013	E
30504010	90013	E
30504020	90013	E
30504021	90013	E
30504022	90013	E
30504023	90013	E
30504024	90013	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30504025	90013	E
30504030	90013	E
30504031	90013	E
30504032	90013	E
30504033	90013	E
30504034	90013	E
30504036	90013	E
30504099	90013	E
30510001	90013	E
30510002	90013	E
30510003	90013	E
30510004	90013	E
30510005	90013	E
30510006	90013	E
30510007	90013	E
30510101	90013	E
30510102	90013	E
30510103	21204	C
30510104	21203	D
30510105	90013	E
30510106	90013	E
30510107	90013	E
30510108	90013	E
30510196	90013	E
30510197	90013	E
30510198	90013	E
30510199	90013	E
30510201	90013	E
30510202	90013	E
30510203	21204	C
30510204	21203	D
30510205	90013	E
30510206	90013	E
30510207	90013	E
30510208	90013	E
30510296	90013	E
30510297	90013	E
30510298	90013	E
30510299	90013	E
30510301	90013	E
30510302	90013	E
30510303	21204	C

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30510304	21203	D
30510305	90013	E
30510306	90013	E
30510307	90013	E
30510308	90013	E
30510396	90013	E
30510397	90013	E
30510398	90013	E
30510399	90013	E
30510401	90013	E
30510402	90013	E
30510403	21204	C
30510404	21203	D
30510405	90013	E
30510406	90013	E
30510407	90013	E
30510408	90013	E
30510496	90013	E
30510497	90013	E
30510498	90013	E
30510499	90013	E
30510501	90013	E
30510502	90013	E
30510503	21204	C
30510504	21203	D
30510505	90013	E
30510506	90013	E
30510507	90013	E
30510508	90013	E
30510596	90013	E
30510597	90013	E
30510598	90013	E
30510599	90013	E
30515001	90013	E
30515002	90013	E
30515003	90013	E
30515004	90013	E
30515005	90013	E
30588801	90013	E
30588802	90013	E
30588803	90013	E
30588804	90013	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30588805	90013	E
30590001	13501*	D
30590002	13501*	D
30590003	26101*	E
30590011	13501*	D
30590012	13501*	D
30590013	26101*	E
30590023	26101*	E
30599999	25401	D
30600101	13501*	D
30600102	26101*	E
30600103	13501*	D
30600104	26101*	E
30600105	26101	E
30600106	26101*	E
30600107	26101*	E
30600108	26101*	E
30600199	26101*	E
30600201	26202	D
30600202	26202*	E
30600301	26202*	E
30600401	00000	E
30600402	00000	E
30600503	00000	E
30600504	00000	E
30600505	00000	E
30600506	00000	E
30600602	00000	E
30600603	00000	E
30600701	00000	E
30600702	00000	E
30600801	00000	E
30600802	00000	E
30600803	00000	E
30600804	00000	E
30600805	00000	E
30600806	00000	E
30600807	00000	E
30600811	00000	E
30600812	00000	E
30600813	00000	E
30600814	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30600815	00000	E
30600816	00000	E
30600817	00000	E
30600818	00000	E
30600819	00000	E
30600820	00000	E
30600821	00000	E
30600822	00000	E
30600901	26101*	E
30600902	26101*	E
30600903	26101*	E
30600904	26101*	E
30600999	26101*	E
30601001	90014	E
30601101	90014	E
30601201	90014	E
30601401	90014	E
30601599	90014	E
30609902	13501*	D
30609903	26101*	E
30609904	26101*	E
30609911	13501*	D
30609912	13501*	D
30609913	26101*	E
30609914	26101*	E
30610001	90014	E
30688801	90014	E
30688802	90014	E
30688803	90014	E
30688804	90014	E
30688805	90014	E
30699998	90014	E
30699999	90014	E
30700101	00000	E
30700102	00000	E
30700103	00000	E
30700104	90015	E
30700105	90015	E
30700106	23202	C
30700107	00000	E
30700108	90015	E
30700109	90014	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30700110	23103	C
30700199	90015	E
30700203	00000	E
30700211	00000	E
30700212	00000	E
30700213	00000	E
30700214	00000	E
30700215	00000	E
30700221	90015	E
30700222	90015	E
30700223	90015	E
30700231	90015	E
30700232	90015	E
30700233	90015	E
30700234	24101	C
30700299	90015	E
30700301	90015	E
30700302	90015	E
30700303	90015	E
30700304	90015	E
30700401	00000	E
30700402	90015	E
30700499	90015	E
30700501	90015	E
30700597	90015	E
30700598	90015	E
30700599	90015	E
30700701	22301	D
30700702	22201	D
30700703	22101	D
30700703	22102	D
30700704	90015	E
30700705	90015	E
30700706	90015	E
30700707	90015	E
30700708	90015	E
30700709	90015	E
30700711	90015	E
30700712	90015	E
30700713	90015	E
30700714	90015	E
30700715	90015	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30700798	90015	E
30700799	90015	E
30700801	90015	E
30700802	90015	E
30700803	90015	E
30700804	22202	D
30700805	90015	E
30700806	90015	E
30700807	90015	E
30700808	90015	E
30700896	90015	E
30700897	90015	E
30700898	90015	E
30700899	90015	E
30701199	90015	E
30701301	90015	E
30701399	90015	E
30702098	90015	E
30702099	90015	E
30703001	90015	E
30703002	90015	E
30703096	90015	E
30703097	90015	E
30703098	90015	E
30703099	90015	E
30788801	90015	E
30788802	90015	E
30788803	90015	E
30788804	90015	E
30788805	90015	E
30788898	90015	E
30790001	13501*	D
30790002	13501*	D
30790003	26101*	E
30790011	13501*	D
30790012	13501*	D
30790013	26101*	E
30790023	26101*	E
30799998	90015	E
30799999	90015	E
30800101	90016	E
30800102	90016	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30800103	90016	E
30800104	90016	E
30800105	90016	E
30800106	90016	E
30800107	90016	E
30800108	90016	E
30800109	90016	E
30800110	90016	E
30800120	90016	E
30800121	90016	E
30800122	90016	E
30800123	90016	E
30800197	90016	E
30800198	90016	E
30800199	90016	E
30800501	90016	E
30800699	90016	E
30800701	90016	E
30800702	90016	E
30800703	90016	E
30800704	90016	E
30800705	90016	E
30800720	90016	E
30800721	90016	E
30800722	90016	E
30800723	90016	E
30800724	90016	E
30800799	90016	E
30890001	13501*	D
30890002	13501*	D
30890003	26101*	E
30890011	13501*	D
30890012	13501*	D
30890013	26101*	E
30890023	26101*	E
30899999	90016	E
30900198	90016	E
30900199	90016	E
30900201	90016	E
30900202	90016	E
30900203	90016	E
30900204	90016	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
30900205	90016	E
30900206	90016	E
30900207	90016	E
30900208	90016	E
30900298	90016	E
30900299	90016	E
30900301	90016	E
30900302	90016	E
30900303	90016	E
30900304	90016	E
30901001	90001	E
30901097	90016	E
30901098	90016	E
30901099	90016	E
30901101	90016	E
30901102	90016	E
30901103	90016	E
30901104	90016	E
30901199	90016	E
30901501	90016	E
30901601	25402*	E
30901604	90016	E
30901605	90016	E
30901606	90016	E
30901607	90016	E
30902099	90016	E
30902501	90016	E
30903004	90016	E
30903005	90016	E
30903006	90016	E
30903099	90016	E
30904001	90016	E
30904010	90016	E
30904020	90016	E
30906001	90016	E
30906099	90016	E
30988801	90016	E
30988802	90016	E
30988803	90016	E
30988804	90016	E
30988804	90016	E
30988805	90016	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
30990001	13501*	D
30990002	13501*	D
30990003	26101*	E
30990011	13501*	D
30990012	13501*	D
30990013	26101*	E
30990023	26101*	E
30999997	90016	E
30999998	90016	E
30999999	90016	E
31000101	90016	E
31000102	90016	E
31000103	90016	E
31000104	90016	E
31000105	90016	E
31000199	90016	E
31000201	00000	E
31000202	90016	E
31000203	90016	E
31000204	90016	E
31000205	90016	E
31000206	90016	E
31000207	90016	E
31000299	90016	E
31000401	13501*	D
31000402	13501*	D
31000403	13501*	D
31000404	26101*	E
31000405	26101*	E
31000411	13501*	D
31000412	13501*	D
31000413	13501*	D
31000414	26101*	E
31000415	26101*	E
31088801	90016	E
31088802	90016	E
31088803	90016	E
31088805	90016	E
31088904	90016	E
31100199	41350*	E
31100299	41350*	E
31299999	90016	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
31307001	90016	E
31307002	90016	E
31390001	13501*	D
31390002	13501*	D
31390003	26101*	E
31399999	90016	E
31400901	90016	E
31401001	90016	E
31401002	90016	E
31401101	90016	E
31401102	90016	E
31499999	90016	E
31501001	90016	E
31501002	90016	E
31501003	90016	E
31502001	90016	E
32099997	90016	E
32099998	90016	E
32099999	90016	E
33000101	90016	E
33000102	90016	E
33000103	90016	E
33000104	90016	E
33000105	90016	E
33000198	90016	E
33000199	90016	E
33000201	90016	E
33000202	90016	E
33000211	90016	E
33000212	90016	E
33000213	90016	E
33000214	90016	E
33000298	90016	E
33000299	90016	E
33000399	90016	E
33000499	90016	E
33000599	90016	E
33088801	90016	E
33088802	90016	E
33088803	90016	E
33088804	90016	E
33088805	90016	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
36000101	90016	E
39000199	00000	E
39000201	00000	E
39000203	00000	E
39000289	00000	E
39000299	00000	E
39000389	00000	E
39000399	00000	E
39000402	00000	E
39000403	00000	E
39000489	00000	E
39000499	00000	E
39000501	00000	E
39000502	00000	E
39000503	00000	E
39000589	00000	E
39000598	00000	E
39000599	00000	E
39000602	00000	E
39000603	00000	E
39000605	00000	E
39000689	00000	E
39000699	00000	E
39000701	00000	E
39000702	00000	E
39000788	00000	E
39000789	00000	E
39000797	00000	E
39000798	00000	E
39000799	00000	E
39000801	00000	E
39000889	00000	E
39000899	00000	E
39000989	00000	E
39000999	00000	E
39001089	00000	E
39001099	00000	E
39001299	00000	E
39001389	00000	E
39001399	00000	E
39990001	13501*	D
39990002	13501*	D

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
39990003	26101*	E
39990004	26101*	E
39990011	13501*	D
39990012	13501*	D
39990013	26101*	E
39990014	26101*	E
39990022	13501*	D
39990023	26101*	E
39990024	26101*	E
39999993	90016	E
39999994	90016	E
39999995	90016	E
39999996	90016	E
39999998	90016	E
39999999	90016	E
40100101	00000	E
40100102	00000	E
40100103	00000	E
40100104	00000	E
40100105	00000	E
40100106	00000	E
40100198	00000	E
40100199	00000	E
40100201	00000	E
40100202	00000	E
40100203	00000	E
40100204	00000	E
40100205	00000	E
40100206	00000	E
40100207	00000	E
40100208	00000	E
40100215	00000	E
40100216	00000	E
40100217	00000	E
40100221	00000	E
40100222	00000	E
40100223	00000	E
40100224	00000	E
40100225	00000	E
40100235	00000	E
40100236	00000	E
40100251	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40100252	00000	E
40100253	00000	E
40100254	00000	E
40100255	00000	E
40100256	00000	E
40100257	00000	E
40100258	00000	E
40100259	00000	E
40100295	00000	E
40100296	00000	E
40100297	00000	E
40100298	00000	E
40100299	00000	E
40100301	00000	E
40100302	00000	E
40100303	00000	E
40100304	00000	E
40100305	00000	E
40100306	00000	E
40100335	00000	E
40100336	00000	E
40100398	00000	E
40100399	00000	E
40100401	00000	E
40100499	00000	E
40188801	00000	E
40188802	00000	E
40188803	00000	E
40188804	00000	E
40188805	00000	E
40188898	00000	E
40200101	25403	E
40200110	25403*	E
40200201	25403*	E
40200210	25403*	E
40200301	25403*	E
40200310	25403*	E
40200401	25403*	E
40200410	25403*	E
40200501	00000	E
40200510	25403*	E
40200601	25403*	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40200610	25403*	E
40200701	25403*	E
40200706	00000	E
40200707	00000	E
40200710	25403*	E
40200801	25403*	E
40200802	25403*	E
40200803	25403*	E
40200810	25403*	E
40200898	25403*	E
40200899	25403*	E
40200901	00000	E
40200902	00000	E
40200903	00000	E
40200904	00000	E
40200905	00000	E
40200906	00000	E
40200907	00000	E
40200908	00000	E
40200909	00000	E
40200910	00000	E
40200911	00000	E
40200912	00000	E
40200913	00000	E
40200914	00000	E
40200915	00000	E
40200916	00000	E
40200917	00000	E
40200918	00000	E
40200919	00000	E
40200920	00000	E
40200921	00000	E
40200922	00000	E
40200923	00000	E
40200924	00000	E
40200925	00000	E
40200926	00000	E
40200927	00000	E
40200928	00000	E
40200998	00000	E
40201001	26101*	E
40201002	13501*	D

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40201003	13501*	D
40201004	26101*	E
40201101	25403*	E
40201103	25403*	E
40201104	25403*	E
40201105	25403*	E
40201111	25403*	E
40201112	25403*	E
40201113	25403*	E
40201114	25403*	E
40201115	25403*	E
40201116	25403*	E
40201199	25403*	E
40201201	25403*	E
40201210	25403*	E
40201301	25403*	E
40201303	25403*	E
40201304	25403*	E
40201305	25403*	E
40201399	25403*	E
40201401	25403*	E
40201402	25403*	E
40201403	25403*	E
40201404	25403*	E
40201405	25403*	E
40201406	25403*	E
40201431	25403*	E
40201432	25403*	E
40201433	25403*	E
40201434	25403*	E
40201435	25403*	E
40201436	25403*	E
40201437	25403*	E
40201438	25403*	E
40201499	25403*	E
40201501	25403*	E
40201502	25403*	E
40201503	25403*	E
40201504	25403*	E
40201505	25403*	E
40201531	25403*	E
40201599	25403*	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40201601	25403*	E
40201602	25403*	E
40201603	25403*	E
40201604	25403*	E
40201605	25403*	E
40201606	25403*	E
40201619	25403*	E
40201620	25403*	E
40201621	25403*	E
40201622	25403*	E
40201623	25403*	E
40201624	25403*	E
40201625	25403*	E
40201626	25403*	E
40201627	25403*	E
40201628	25403*	E
40201629	25403*	E
40201630	25403*	E
40201631	25403*	E
40201632	25403*	E
40201699	25403*	E
40201702	25403*	E
40201703	25403*	E
40201704	25403*	E
40201705	25403*	E
40201721	25403*	E
40201722	25403*	E
40201723	25403*	E
40201724	25403*	E
40201725	25403*	E
40201726	25403*	E
40201727	25403*	E
40201728	25403*	E
40201731	25403*	E
40201732	25403*	E
40201733	25403*	E
40201734	25403*	E
40201735	25403*	E
40201736	25403*	E
40201799	25403*	E
40201801	25403*	E
40201803	25403*	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40201804	25403*	E
40201805	25403*	E
40201806	25403*	E
40201899	25403*	E
40201901	25403*	E
40201903	25403*	E
40201904	25403*	E
40201999	25403*	E
40202001	25403*	E
40202002	25403*	E
40202003	25403*	E
40202004	25403*	E
40202005	25403*	E
40202031	25403*	E
40202032	25403*	E
40202033	25403*	E
40202034	25403*	E
40202099	25403*	E
40202101	25403*	E
40202103	25403*	E
40202104	25403*	E
40202105	25403*	E
40202106	25403*	E
40202107	25403*	E
40202108	25403*	E
40202109	25403*	E
40202131	25403*	E
40202132	25403*	E
40202133	25403*	E
40202199	25403*	E
40202201	25403*	E
40202202	25403*	E
40202203	25403*	E
40202204	25403*	E
40202205	25403*	E
40202299	25403*	E
40202301	25403*	E
40202302	25403*	E
40202303	25403*	E
40202304	25403*	E
40202305	25403*	E
40202306	25403*	E

SCC	PROFILE NUMBER	QUALITY
40202399	25403*	E
40202401	25403*	E
40202402	25403*	E
40202403	25403*	E
40202404	25403*	E
40202405	25403*	E
40202406	25403*	E
40202499	25403*	E
40202501	25403*	E
40202502	25403*	E
40202503	25403*	E
40202504	25403*	E
40202505	25403*	E
40202531	25403*	E
40202532	25403*	E
40202533	25403*	E
40202534	25403*	E
40202535	25403*	E
40202536	25403*	E
40202537	25403*	E
40202599	25403*	E
40202601	25403*	E
40202602	25403*	E
40202603	25403*	E
40202604	25403*	E
40202605	25403*	E
40202606	25403*	E
40202607	25403*	E
40202699	25403*	E
40288801	25403*	E
40288802	25403*	E
40288803	25403*	E
40288804	25403*	E
40288805	25403*	E
40290023	25403*	E
40299995	25403*	E
40299996	25403*	E
40299997	25403*	E
40299998	25403*	E
40299999	25403*	E
40300101	00000	E
40300102	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40300103	00000	E
40300104	00000	E
40300105	00000	E
40300106	00000	E
40300107	00000	E
40300108	00000	E
40300109	00000	E
40300110	00000	E
40300111	00000	E
40300112	00000	E
40300113	00000	E
40300114	00000	E
40300115	00000	E
40300116	00000	E
40300150	00000	E
40300151	00000	E
40300152	00000	E
40300153	00000	E
40300154	00000	E
40300155	00000	E
40300156	00000	E
40300157	00000	E
40300158	00000	E
40300159	00000	E
40300160	00000	E
40300161	00000	E
40300198	00000	E
40300199	00000	E
40300201	00000	E
40300202	00000	E
40300203	00000	E
40300204	00000	E
40300205	00000	E
40300207	00000	E
40300208	00000	E
40300209	00000	E
40300210	00000	E
40300211	00000	E
40300212	00000	E
40300213	00000	E
40300214	00000	E
40300215	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
40300216	00000	E
40300299	00000	E
40300302	00000	E
40301001	00000	E
40301002	00000	E
40301003	00000	E
40301004	00000	E
40301005	00000	E
40301006	00000	E
40301007	00000	E
40301008	00000	E
40301009	00000	E
40301010	00000	E
40301011	00000	E
40301012	00000	E
40301013	00000	E
40301014	00000	E
40301015	00000	E
40301016	00000	E
40301017	00000	E
40301018	00000	E
40301019	00000	E
40301020	00000	E
40301021	00000	E
40301097	00000	E
40301098	00000	E
40301099	00000	E
40301101	00000	E
40301102	00000	E
40301103	00000	E
40301104	00000	E
40301105	00000	E
40301106	00000	E
40301107	00000	E
40301108	00000	E
40301109	00000	E
40301110	00000	E
40301111	00000	E
40301112	00000	E
40301113	00000	E
40301114	00000	E
40301115	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40301116	00000	E
40301117	00000	E
40301118	00000	E
40301119	00000	E
40301120	00000	E
40301130	00000	E
40301131	00000	E
40301132	00000	E
40301133	00000	E
40301134	00000	E
40301135	00000	E
40301140	00000	E
40301141	00000	E
40301142	00000	E
40301143	00000	E
40301144	00000	E
40301145	00000	E
40301150	00000	E
40301151	00000	E
40301152	00000	E
40301153	00000	E
40301154	00000	E
40301155	00000	E
40301197	00000	E
40301198	00000	E
40301199	00000	E
40301201	00000	E
40301202	00000	E
40301203	00000	E
40301204	00000	E
40301205	00000	E
40301206	00000	E
40301207	00000	E
40301299	00000	E
40388801	00000	E
40388802	00000	E
40388803	00000	E
40388804	00000	E
40388805	00000	E
40399999	00000	E
40400101	00000	E
40400102	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
40400103	00000	E
40400104	00000	E
40400105	00000	E
40400106	00000	E
40400107	00000	E
40400108	00000	E
40400109	00000	E
40400110	00000	E
40400111	00000	E
40400112	00000	E
40400113	00000	E
40400114	00000	E
40400115	00000	E
40400116	00000	E
40400117	00000	E
40400118	00000	E
40400119	00000	E
40400120	00000	E
40400151	00000	E
40400152	00000	E
40400153	00000	E
40400154	00000	E
40400199	00000	E
40400201	00000	E
40400202	00000	E
40400203	00000	E
40400204	00000	E
40400205	00000	E
40400206	00000	E
40400207	00000	E
40400208	00000	E
40400209	00000	E
40400210	00000	E
40400211	00000	E
40400212	00000	E
40400213	00000	E
40400250	00000	E
40400251	00000	E
40400254	00000	E
40400301	00000	E
40400302	00000	E
40400303	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40400304	00000	E
40400305	00000	E
40400401	00000	E
40400402	00000	E
40400403	00000	E
40400404	00000	E
40400405	00000	E
40400406	00000	E
40400407	00000	E
40400408	00000	E
40400409	00000	E
40400410	00000	E
40400411	00000	E
40400412	00000	E
40400413	00000	E
40400414	00000	E
40400497	00000	E
40400498	00000	E
40500101	26101*	E
40500199	26101*	E
40500201	00000	E
40500202	00000	E
40500203	00000	E
40500211	00000	E
40500212	00000	E
40500301	00000	E
40500302	00000	E
40500303	00000	E
40500304	00000	E
40500305	00000	E
40500306	00000	E
40500307	00000	E
40500311	00000	E
40500312	00000	E
40500401	00000	E
40500411	00000	E
40500412	00000	E
40500413	00000	E
40500501	00000	E
40500502	00000	E
40500503	00000	E
40500506	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
40500507	00000	E
40500510	00000	E
40500511	00000	E
40500512	00000	E
40500513	00000	E
40500598	00000	E
40500599	00000	E
40500601	00000	E
40500701	00000	E
40588801	00000	E
40588802	00000	E
40588803	00000	E
40588804	00000	E
40588805	00000	E
40600101	00000	E
40600126	00000	E
40600130	00000	E
40600131	00000	E
40600132	00000	E
40600133	00000	E
40600134	00000	E
40600135	00000	E
40600136	00000	E
40600137	00000	E
40600138	00000	E
40600139	00000	E
40600140	00000	E
40600141	00000	E
40600142	00000	E
40600143	00000	E
40600144	00000	E
40600145	00000	E
40600146	00000	E
40600147	00000	E
40600148	00000	E
40600149	00000	E
40600160	00000	E
40600161	00000	E
40600162	00000	E
40600163	00000	E
40600197	00000	E
40600198	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
40600199	00000	E
40600231	00000	E
40600232	00000	E
40600233	00000	E
40600234	00000	E
40600235	00000	E
40600236	00000	E
40600237	00000	E
40600238	00000	E
40600239	00000	E
40600240	00000	E
40600241	00000	E
40600242	00000	E
40600243	00000	E
40600244	00000	E
40600245	00000	E
40600246	00000	E
40600248	00000	E
40600249	00000	E
40600250	00000	E
40600251	00000	E
40600253	00000	E
40600254	00000	E
40600255	00000	E
40600256	00000	E
40600257	00000	E
40600259	00000	E
40600298	00000	E
40600299	00000	E
40600301	00000	E
40600302	00000	E
40600305	00000	E
40600306	00000	E
40600307	00000	E
40600399	00000	E
40600401	00000	E
40600402	00000	E
40600403	00000	E
40600499	00000	E
40688801	00000	E
40688802	00000	E
40688803	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40688804	00000	E
40688805	00000	E
40700401	00000	E
40700402	00000	E
40700497	00000	E
40700498	00000	E
40700801	00000	E
40700802	00000	E
40700803	00000	E
40700804	00000	E
40700805	00000	E
40700806	00000	E
40700807	00000	E
40700808	00000	E
40700809	00000	E
40700810	00000	E
40700811	00000	E
40700812	00000	E
40700813	00000	E
40700814	00000	E
40700815	00000	E
40700816	00000	E
40700817	00000	E
40700818	00000	E
40700897	00000	E
40700898	00000	E
40701601	00000	E
40701602	00000	E
40701603	00000	E
40701604	00000	E
40701605	00000	E
40701606	00000	E
40701609	00000	E
40701610	00000	E
40701611	00000	E
40701612	00000	E
40701613	00000	E
40701614	00000	E
40701697	00000	E
40701698	00000	E
40702001	00000	E
40702002	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40702003	00000	E
40702004	00000	E
40702097	00000	E
40702098	00000	E
40703201	00000	E
40703202	00000	E
40703203	00000	E
40703204	00000	E
40703205	00000	E
40703206	00000	E
40703297	00000	E
40703298	00000	E
40703601	00000	E
40703602	00000	E
40703603	00000	E
40703604	00000	E
40703605	00000	E
40703606	00000	E
40703607	00000	E
40703608	00000	E
40703609	00000	E
40703610	00000	E
40703611	00000	E
40703612	00000	E
40703613	00000	E
40703614	00000	E
40703615	00000	E
40703616	00000	E
40703617	00000	E
40703618	00000	E
40703619	00000	E
40703620	00000	E
40703621	00000	E
40703622	00000	E
40703623	00000	E
40703624	00000	E
40703697	00000	E
40703698	00000	E
40704001	00000	E
40704002	00000	E
40704003	00000	E
40704004	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40704005	00000	E
40704006	00000	E
40704007	00000	E
40704008	00000	E
40704009	00000	E
40704010	00000	E
40704097	00000	E
40704098	00000	E
40704401	00000	E
40704402	00000	E
40704403	00000	E
40704404	00000	E
40704405	00000	E
40704406	00000	E
40704407	00000	E
40704408	00000	E
40704409	00000	E
40704410	00000	E
40704411	00000	E
40704412	00000	E
40704413	00000	E
40704414	00000	E
40704415	00000	E
40704416	00000	E
40704417	00000	E
40704418	00000	E
40704419	00000	E
40704420	00000	E
40704421	00000	E
40704422	00000	E
40704423	00000	E
40704424	00000	E
40704497	00000	E
40704498	00000	E
40704801	00000	E
40704802	00000	E
40704897	00000	E
40704898	00000	E
40705201	00000	E
40705202	00000	E
40705203	00000	E
40705204	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
40705205	00000	E
40705206	00000	E
40705207	00000	E
40705208	00000	E
40705209	00000	E
40705210	00000	E
40705211	00000	E
40705212	00000	E
40705213	00000	E
40705214	00000	E
40705215	00000	E
40705216	00000	E
40705217	00000	E
40705218	00000	E
40705297	00000	E
40705298	00000	E
40705601	00000	E
40705602	00000	E
40705603	00000	E
40705604	00000	E
40705605	00000	E
40705606	00000	E
40705607	00000	E
40705608	00000	E
40705609	00000	E
40705610	00000	E
40705697	00000	E
40705698	00000	E
40706001	00000	E
40706002	00000	E
40706003	00000	E
40706004	00000	E
40706005	00000	E
40706006	00000	E
40706007	00000	E
40706008	00000	E
40706009	00000	E
40706010	00000	E
40706011	00000	E
40706012	00000	E
40706013	00000	E
40706014	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40706015	00000	E
40706016	00000	E
40706017	00000	E
40706018	00000	E
40706019	00000	E
40706020	00000	E
40706021	00000	E
40706022	00000	E
40706023	00000	E
40706024	00000	E
40706097	00000	E
40706098	00000	E
40706401	00000	E
40706402	00000	E
40706403	00000	E
40706404	00000	E
40706497	00000	E
40706498	00000	E
40706801	00000	E
40706802	00000	E
40706813	00000	E
40706814	00000	E
40706897	00000	E
40706898	00000	E
40707601	00000	E
40707602	00000	E
40707697	00000	E
40707698	00000	E
40708001	00000	E
40708002	00000	E
40708097	00000	E
40708098	00000	E
40708401	00000	E
40708402	00000	E
40708403	00000	E
40708404	00000	E
40708497	00000	E
40708498	00000	E
40717205	00000	E
40717206	00000	E
40717207	00000	E
40717208	00000	E

TABLE E-1. (Continued)

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SCC	PROFILE NUMBER	QUALITY
40717209	00000	E
40717210	00000	E
40717211	00000	E
40717212	00000	E
40717297	00000	E
40717298	00000	E
40717601	00000	E
40717602	00000	E
40717603	00000	E
40717604	00000	E
40717697	00000	E
40717698	00000	E
40718097	00000	E
40720801	00000	E
40720802	00000	E
40720803	00000	E
40720804	00000	E
40720897	00000	E
40720898	00000	E
40722001	00000	E
40722002	00000	E
40722003	00000	E
40722004	00000	E
40722005	00000	E
40722006	00000	E
40722007	00000	E
40722008	00000	E
40722009	00000	E
40722010	00000	E
40722097	00000	E
40722098	00000	E
40722801	00000	E
40722802	00000	E
40722803	00000	E
40722804	00000	E
40722805	00000	E
40722806	00000	E
40722897	00000	E
40722898	00000	E
40723201	00000	E
40723202	00000	E
40723297	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40723298	00000	E
40781201	00000	E
40781202	00000	E
40781601	00000	E
40781602	00000	E
40781603	00000	E
40781604	00000	E
40781605	00000	E
40781699	00000	E
40782001	00000	E
40782002	00000	E
40782003	00000	E
40782004	00000	E
40782005	00000	E
40782006	00000	E
40782007	00000	E
40782008	00000	E
40782009	00000	E
40782010	00000	E
40782011	00000	E
40782099	00000	E
40782401	00000	E
40782499	00000	E
40783201	00000	E
40783202	00000	E
40783203	00000	E
40783299	00000	E
40784801	00000	E
40784899	00000	E
40786001	00000	E
40786002	00000	E
40786003	00000	E
40786004	00000	E
40786099	00000	E
40786401	00000	E
40786499	00000	E
40787201	00000	E
40787299	00000	E
40799997	00000	E
40799998	00000	E
40899995	00000	E
40899997	00000	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
40899999	00000	E
49000101	00000	E
49000102	00000	E
49000103	00000	E
49000104	00000	E
49000105	00000	E
49000199	00000	E
49000201	00000	E
49000202	00000	E
49000203	26101*	E
49000204	00000	E
49000205	00000	E
49000206	00000	E
49000299	00000	E
49000301	00000	E
49000302	00000	E
49000303	00000	E
49000304	00000	E
49000399	00000	E
49000401	00000	E
49000402	00000	E
49000403	00000	E
49000404	00000	E
49000405	00000	E
49000499	00000	E
49090011	13501*	D
49090012	13501*	D
49090013	26101*	E
49090023	26101*	E
49099998	00000	E
49099999	00000	E
50100101	17106	E
50100102	17106*	E
50100201	90001	E
50100202	42320*	E
50100505	90001	E
50100506	17120	D
50100507	90001	E
50100508	90001	E
50100510	42320*	E
50100511	90001	E
50100512	90001	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
50100601	90001	E
50100602	90001	E
50100603	90001	E
50100604	42320*	E
50100701	90001	E
50100702	90001	E
50100703	90001	E
50100704	90001	E
50190005	00000	E
50190006	00000	E
50190010	00000	E
50200101	90001	E
50200102	90001	E
50200103	90001	E
50200104	17106*	E
50200105	42320*	E
50200201	42320*	E
50200202	90001	E
50200301	90001	E
50200302	90001	E
50200505	90001	E
50200506	17120*	E
50200601	90001	E
50200602	90001	E
50200901	90001	E
50290005	00000	E
50290006	00000	E
50290010	00000	E
50300101	90001	E
50300102	90001	E
50300103	90001	E
50300104	90001	E
50300105	42320*	E
50300106	42320*	E
50300107	90001	E
50300108	90001	E
50300109	90001	E
50300201	42320*	E
50300202	90001	E
50300203	90001	E
50300204	90001	E
50300501	90001	E

TABLE E-1. (Continued)

SCC	PROFILE NUMBER	QUALITY
50300506	17120*	E
50300601	90001	E
50300602	90001	E
50300603	90001	E
50300701	90001	E
50300801	90001	E
50300810	90001	E
50300820	90001	E
50300901	90001	E
50390005	00000	E
50390006	00000	E
50390010	00000	E

TABLE E-2. AREA SOURCE PROFILE ASSIGNMENTS

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SCC	PROFILE NUMBER	QUALITY
001	11201*	E
002	43201	E
003	13501*	D
004	13501*	D
005	26101*	E
006	42330	D
007	11201*	E
008	11201*	E
009	13501*	D
010	13501	C
011	26101*	E
012	12704*	E
013	11201*	E
014	11201*	E
015	11201*	E
016	13501*	D
017	13501*	D
018	26101	E
019	12704	D
020	26101*	E
021	17106*	E
022	17106*	E
023	17106*	E
024	42320*	D
025	42320*	D
026	42320*	D
027	31230	D
028	31230	D
029	31230	D
030	31230	D
031	31230*	E
032	31230*	E
033	31230*	E
034	31230*	E
035	31102	D
036	31102	D
037	31102	D
038	31102	D
039	31230*	E
040	32202	C
041	32202	C
042	32202	C

TABLE E-2. (Continued)

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SCC	PROFILE NUMBER	QUALITY
043	32202	C
044	32101*	E
045	32202*	D
046	34001	E
047	34001	E
048	34001	E
049	11201*	E
050	32202*	D
051	13501*	D
052	31102*	E
054	00000	E
055	41220	D
056	41220*	E
057	41350*	E
058	41350	D
059	41350*	E
060	42320*	E
061	42320*	E
062	42320	D
063	43302	D
064	42320*	E
071	90003	E
072	90003	E
073	90003	E
074	90003	E
076	90003	E
077	41350*	E
078	00000	E
079	00000	E
080	00000	E
081	00000	E
082	00000	E
083	00000	E
084	00000	E
085	00000	E
086	00000	E
087	00000	E
088	00000	E
089	00000	E
090	00000	E
091	00000	E
092	00000	E

TABLE E-2. (Continued)

SCC	PROFILE NUMBER	QUALITY
093	00000	E
094	00000	E
095	00000	E
096	11201	D
097	11501	D
098	26101*	E
099	90016	E
100	90001	E
101	00000	E
102	00000	E
103	00000	E
104	00000	E
105	90002	E
106	90002	E
107	90016	E
108	90013	E
109	90001	E
110	33020	D
111	32101	D
112	34002	E
113	41130	E
114	43101	E
115	43301	D

TABLE E-3. AREA SOURCE CODE DESCRIPTIONS

Area Source Code	Category Description
001	Residential Fuel - Anthracite Coal
002	Residential Fuel - Bituminous Coal
003	Residential Fuel - Distillate Oil
004	Residential Fuel - Residual Oil
005	Residential Fuel - Natural Gas
006	Residential Fuel - Wood
007	Commercial/Institutional Fuel - Anthracite Coal
008	Commercial/Institutional Fuel - Bituminous Coal
009	Commercial/Institutional Fuel - Distillate Oil
010	Commercial/Institutional Fuel - Residual Oil
011	Commercial/Institutional Fuel - Natural Gas
012	Commercial/Institutional Fuel - Wood
013	Industrial Fuel - Anthracite Coal
014	Industrial Fuel - Bituminous Coal
015	Industrial Fuel - Coke
016	Industrial Fuel - Distillate Oil
017	Industrial Fuel - Residual Oil
018	Industrial Fuel - Natural Gas
019	Industrial Fuel - Wood
020	Industrial Fuel - Process Gas
021	On-Site Incineration - Residential
022	On-Site Incineration - Industrial
023	On-Site Incineration - Commercial/Institutional
024	Open Burning - Residential
025	Open Burning - Industrial
026	Open Burning - Commercial/Institutional
027	Light-Duty Gasoline Vehicles - Limited Access Roads
028	Light-Duty Gasoline Vehicles - Rural Roads
029	Light-Duty Gasoline Vehicles - Suburban Roads

TABLE E-3. AREA SOURCE CODE DESCRIPTIONS (Continued)

Area Source Code	Category Description
030	Light-Duty Gasoline Vehicles - Urban Roads
031	Medium-Duty Gasoline Vehicles - Limited Access Roads
032	Medium-Duty Gasoline Vehicles - Rural Roads
033	Medium-Duty Gasoline Vehicles - Suburban Roads
034	Medium-Duty Gasoline Vehicles - Urban Roads
035	Heavy-Duty Gasoline Vehicles - Limited Access Roads
036	Heavy-Duty Gasoline Vehicles - Rural Roads
037	Heavy-Duty Gasoline Vehicles - Suburban Roads
038	Heavy-Duty Gasoline Vehicles - Urban Roads
039	Off-Highway Gasoline Vehicles
040	Heavy-Duty Diesel Vehicles - Limited Access Roads
041	Heavy-Duty Diesel Vehicles - Rural Roads
042	Heavy-Duty Diesel Vehicles - Suburban Roads
043	Heavy-Duty Diesel Vehicles - Urban Roads
044	Off-Highway Diesel Vehicles
045	Railroad Locomotives
046	Aircraft (Landing and Takeoff) LTO - Military
047	Aircraft (Landing and Takeoff) LTO - Civil
048	Aircraft (Landing and Takeoff) LTO - Commercial
049	Vessels - Coal
050	Vessels - Diesel Oil
051	Vessels - Residual Oil
052	Vessels - Gasoline
054	Gasoline Marketed
055	Unpaved Road Travel
056	Unpaved Airstrip LTOs
057	Construction
058	Miscellaneous Wind Erosion
059	Land Tilling

TABLE E-3. AREA SOURCE CODE DESCRIPTIONS (Continued)

Area Source Code	Category Description
060	Forest Wild Fires
061	Managed Burning - Prescribed
062	Agricultural Field Burning
063	Frost Control - Orchard Heaters
064	Structural Fires
071	Beef Cattle Manure Field Application
072	Dairy Cattle Manure Field Application
073	Hog and Pig Manure Field Application
074	Broiler Chicken Manure Field Application
075	Other Chicken Manure Field Application
076	Anhydrous Ammonia Fertilizer Application
077	Beef Cattle Feed Lots
078	Degreasing
079	Drycleaning
080	Graphic Arts (Printing)
081	Rubber and Plastics Manufacturing
082	Architectural Coating
083	Auto Body Repair
084	Motor Vehicle Manufacturing
085	Paper Coating
086	Fabricated Metals
087	Machinery Manufacturing
088	Furniture Manufacturing
089	Flat Wood Products
090	Other Transportation Equipment Manufacturing
091	Electrical Equipment Manufacturing
092	Ship Building and Repairing
093	Miscellaneous Industrial Manufacturing
094	Miscellaneous Industrial Solvent Use

TABLE E-3. AREA SOURCE CODE DESCRIPTIONS (Continued)

Area Source Code	Category Description
095	Miscellaneous Nonindustrial Solvent Use
096	Minor Utility Sources - Coal
097	Minor Utility Sources - Oil
098	Minor Utility Sources - Gas
099	Minor Point Sources
100	Publicly Owned Treatment Works (POTWs)
101	Fugitive Emissions from Synthetic Organic Chemical Manufacture
102	Bulk Terminals and Bulk Plants
103	Fugitive Emissions from Petroleum Refining Operations
104	Process Emissions from Bakeries
105	Process Emissions from Pharmaceutical Manufacture
106	Process Emissions from Synthetic Fibers Manufacture
107	Crude Oil and Natural Gas Production Fields
108	Cutback Asphalt Paving Operations
109	Hazardous Waste Treatment, Storage, and Disposal Facilities
110	Transportation Composite
111	Light-Duty Diesel Vehicles
112	Tire Wear
113	Paved Roads
114	Marine Aerosol
115	Volcanic Ash

The third column entitled "Data Quality" contains a rating of the profile assignment. If the profile assignment is based on an original profile, the entry for this column consists of the Profile Data Quality as it appears in Section 3. If engineering judgement is used, the data quality is lowered one or more levels, depending on how well the profile represents the "new" source category.

In some cases, more than one profile assignment is reported for a given SCC. This is typically due to the different control devices used. To facilitate use of this information in NAPAP modeling activities, a data file was developed that indicates the applicable control device code for each profile in the data base. This information is presented in Table E-4. The control device codes were obtained from AEROS Manual of Codes - Volume V. The codes used are as follows:

000 - Uncontrolled (control device not applicable)
002 - Scrubber (medium efficiency)
005 - Mechanical collector (medium efficiency)
008 - Centrifugal collector (medium efficiency)
011 - Electrostatic precipitator (medium efficiency)
017 - Baghouse (medium efficiency)
028 - Water spray booth
099 - Miscellaneous control devices/unspecified

TABLE E-4. PROFILE CONTROL DEVICE CODES

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PROFILE NUMBER	CONTROL DEVICE CODES
00000	000
11201	011
11501	005
11801	008
12201	000
12704	002
13501	000
17105	000
17106	011 017 002
17120	002
17121	002
17122	002
17123	002
17124	002
19101	000
20101	000
20102	017
20401	017
20501	099
20502	002
21101	000
21102	000
21103	000
21150	000
21203	000
21204	000
21205	000
21206	000
21301	000
21302	000
21303	000
21304	000
21320	000
21340	000
21401	000
21501	000
22101	008
22102	002
22201	008
22202	000
22301	000
23103	011 002

TABLE E-4. (Continued)

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PROFILE NUMBER	CONTROL DEVICE CODES
23202	002
24101	000
25201	000
25302	000
25401	017
25402	099
25403	028
25404	008 017
25405	017
25406	000
25407	000
26101	000
26202	011
27102	000
27201	017
27203	011
27501	017
28201	099
28202	099
28301	017
28302	011
28303	011
28304	017
28401	017
28601	000
29101	017
29102	000
29202	011
29203	002
29301	000
29302	017
29303	017
29304	017
29305	017
29306	017
29307	000
29309	000
29330	017
31101	000
31102	000
31201	000
31230	000

TABLE E-4. (Continued)

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PROFILE NUMBER	CONTROL DEVICE CODES
32101	000
32202	000
33001	000
33002	000
33003	000
33020	000
34001	000
34002	000
41101	000
41102	000
41103	000
41104	000
41105	000
41106	000
41107	000
41109	000
41110	000
41130	000
41201	000
41203	000
41204	000
41220	000
41301	000
41302	000
41303	000
41304	000
41305	000
41306	000
41307	000
41308	000
41309	000
41310	000
41311	000
41312	000
41313	000
41314	000
41315	000
41316	000
41318	000
41319	000
41320	000
41350	000

TABLE E-4. (Continued)

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PROFILE NUMBER	CONTROL DEVICE CODES
41401	000
42101	000
42102	000
42103	000
42201	000
42202	000
42301	000
42302	000
42303	000
42304	000
42320	000
42330	000
43101	000
43201	000
43301	000
43302	000
43303	011
90001	000
90002	000
90003	000
90004	000
90005	000
90006	000
90007	000
90008	000
90009	000
90010	000
90011	000
90012	000
90013	000
90014	000
90015	000
90016	000

APPENDIX F
REACTIVITY FRACTIONS FOR THE ALKALINE ELEMENTS K, Na, Ca, AND Mg

This appendix discusses the development and compilation of reactivity fractions for alkaline particulate species (K, Na, Ca, and Mg). Alkaline particulate emissions such as K, Na, Ca, and Mg can play a role in reducing the acidity of precipitation produced by some air pollutants. "Reactivity fraction" in this text refers to the fraction of each of these elements which is present as an oxide, carbonate, carbide, or hydroxide. These are species in which the cation is readily dissociated and available for reaction with acidic solutions. The reactivity fraction would be the portion of the element which could potentially react with acidic species. The following expression can be used to estimate the "reactive" emissions rate in size interval Y for a specific alkaline species Z from source category X:

> "Reactive" emissions rate$_{Z,X,Y}$ = (total particulate emissions rate, category X) x [(1/100) x weight percent of Z, category X, size range Y] x (reactive fraction, category X, species Z)

Total particulate emissions rate can be determined from data in National Emissions Data System (NEDS). The PM profiles in this document provide the composition data and this appendix contains the reactive fraction data that would be required to carry out this calculation.

In this study, reactivity fractions were developed for the PM profiles in the Receptor Model Source Composition Library. Where applicable, the reactivity fractions were taken directly from Reference 1 ("Anthropogenic Sources and Emissions of Alkaline Particulate Matter in Canada"). The reactivity data were located by using a computerized literature search and review of references listed in useful documents. The literature search was initiated with a preliminary run using the keywords: sodium, calcium, potassium, magnesium, particulate emission, oxide, hydroxide, and carbonate. Data bases used include: Biosis Previews, Enviroline, Pollution Abstracts, CAB Abstracts, Engineering Meetings, CAsearch, and NTIS. In the second phase of the search, the key words used were sodium, calcium, potassium, magnesium, emissions, and source category name. NTIS, Enviroline, and Engineering Meetings were the data bases reviewed.

Approximately 80 references were identified as possibly useful sources. Half of the sources could be located, but only seven proved useful. Many references contained information on K, Na, Ca, and Mg percentages but did not indicate the species or compound with which they were associated. Therefore, engineering judgement was used in several cases to develop estimates for the reactivity fractions. Table F-1 presents a listing of the PM profiles in the data base and the reactivity fractions associated with K, Na, Ca, and Mg. The "Data Quality" column in this table indicates the confidence levels associated with the reactivity fractions. The following rating scheme is used here to assign data quality or confidence levels to the reactivity numbers. This is the same scheme used in the Canadian report (Reference 1) cited above.

Data Quality Classification:

A - Based on actual source test data for a specific point source.

B - Based on limited number of tests or source measurements for similar industries.

C - Developed from analytical data on product, feed, or other secondary material.

D - Based on limited analytical data for category or related category and where some estimation is involved.

E - Estimate.

The last column in the table indicates the data source. For cases where no information was identified, a default value of 0.5 was assigned as indicated by an asterisk (*).

An attempt was made to develop better numbers for categories with "E" ratings from the Canadian report. For example, a value of 0.70 reactive fraction was derived for wood combustion from Reference 4 in this study. This value is close to the 0.75 value given in the Canadian report.

TABLE F-1. REACTIVITY FRACTIONS

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
11201	Coal-Fired Power Plant	1.00	0.51	1.00	1.00	C	1
11501	Oil-Fired Power Plant	1.00	0.51	1.00	1.00	C	1
11801	Wood-Fired Boiler with Multicyclone	0.75	0.75	0.75	0.75	E	1
12201	External Combustion Boiler - Coal Slurry	1.00	0.51	1.00	1.00	C	1
12704	Wood-Fired Boiler with Wet Scrubber	0.75	0.75	0.75	0.75	E	1
13501	Residual Oil Combustion	1.00	0.51	1.00	1.00	C	1
17105	Municipal Incinerator Philadelphia	0.10	0.10	0.10	0.10	E	1
17106	Municipal Incinerator Composite	0.10	0.10	0.10	0.10	E	1
17120	Sewage Sludge Incinerator - Composite	0.10	0.10	0.10	0.10	E	1
17121	Sewage Sludge Incinerator	0.10	0.10	0.10	0.10	E	1
17122	Sewage Sludge Incinerator	0.10	0.10	0.10	0.10	E	1
17123	Sewage Sludge Incinerator	0.10	0.10	0.10	0.10	E	1
17124	Sewage Sludge Incinerator	0.10	0.10	0.10	0.10	E	1
19101	Scrap Copper Incinerator	0.50	0.50	0.50	0.50	E	*
20101	Al - Foundry - Reverb. Furnace	0.00	0.00	0.00	0.00	D	1
20102	Secondary Aluminum Plant	0.00	0.00	0.00	0.00	D	1
20401	Secondary Pb Smelter	0.50	0.50	0.50	0.50	E	*
20501	Zn Oxide Kiln	0.50	0.50	0.50	0.50	E	*
20502	Sb Oxide Plant	0.50	0.50	0.50	0.50	E	*
21101	Limestone Dust	0.00	1.00	1.00	1.00	C	1
21102	Primary Pb Smelting Ore Conc.	0.50	0.50	0.50	0.50	E	*
21103	Primary Pb Smelting Ore Conc. Composite	0.50	0.50	0.50	0.50	E	*
21150	Primary Pb Smelting Ore Conc. Composite	0.50	0.50	0.50	0.50	E	*

TABLE F-1. REACTIVITY FRACTIONS (Continued)

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
21203	Coke Dust	0.50	0.50	0.50	0.50	E	*
21204	Coal Dust	0.50	0.50	0.50	0.50	E	*
21205	Primary Pb Smelting Species Fug. Dust	0.50	0.50	0.50	0.50	E	*
21206	Primary Pb Smelting Soda Flux Fug. Dust	0.50	0.50	0.50	0.50	E	*
21301	Cu Ore Crushing	0.00	0.00	0.00	0.00	E	5
21302	Cu Ore Mill Wastepile	0.00	0.00	0.00	0.00	E	5
21303	Cu Ore Concentrate	0.00	0.00	0.00	0.00	E	5
21304	Cu Mining Waste	0.00	0.00	0.00	0.00	E	5
21320	Cu Ore Processing Composite	0.00	0.00	0.00	0.00	E	5
21340	Cu Ore Composite	0.00	0.00	0.00	0.00	E	5
21401	Feed and Grain Handling Dust	0.50	0.50	0.50	0.50	E	*
21501	Primary Pb Smelting - Slag Dust	0.50	0.50	0.50	0.50	E	*
22101	Particle Board Dryer	0.50	0.50	0.50	0.50	E	*
22102	Particle Board Dryer	0.50	0.50	0.50	0.50	E	*
22201	Wood Products - Sanderdust	0.50	0.50	0.50	0.50	E	*
22202	Sawdust	0.50	0.50	0.50	0.50	E	*
22301	Veneer Dryer	0.50	0.50	0.50	0.50	E	*
23103	Kraft Recov. Furnace	0.00	1.00	0.05	0.00	C	1
23202	Lime Kiln	0.00	1.00	1.00	1.00	C	1
24101	Sulfite Rec. Boiler	0.00	1.00	0.05	0.00	D	1
25201	Calcium Carbide Furnace	0.50	0.50	0.50	0.50	E	*
25302	Charcoal Manufacturing	0.50	0.50	0.50	0.50	E	*
25401	Silica Manufacturing	0.14	0.14	0.14	0.14	D	2

TABLE F-1. REACTIVITY FRACTIONS (Continued)

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
25402	Asphalt Roofing Manufacturing	0.30	0.30	0.30	0.30	D	2
25403	Paint Spray Booth	0.50	0.50	0.50	0.50	E	*
25404	Urea Fert. Production	0.50	0.50	0.50	0.50	E	*
25405	Boric Acid Manufacturing	0.00	0.00	0.00	0.00	B	2
25406	Carborundum Manufacturing	0.50	0.50	0.50	0.50	E	*
25407	Phosphorous Plant Plume	0.00	0.09	0.00	0.00	C	1
26101	Refinery Process Heaters - Gas	1.00	0.51	1.00	1.00	C	1
26202	Petroleum Ref. Catalytic Cracker	1.00	0.51	1.00	1.00	C	1
27102	Glass Furnace	0.14	0.14	0.14	0.14	D	2
27201	Cement Kiln (Gas-Fired)	0.00	0.95	0.00	1.00	B	1
27203	Cement Kiln (Coal-Fired)	0.00	0.95	0.00	1.00	B	1
27501	Gypsum Calciner	0.00	0.00	0.00	0.00	C	1
28201	Cast Fe Induction Furnace	0.85	0.75	0.98	0.88	E	1
28202	Cast Fe Cupola	0.85	0.75	0.98	0.88	E	1
28301	Steel Production - Steel Sinter Plant	0.85	0.75	0.98	0.88	E	1
28302	Steel Production - Open Hearth Furnace	0.85	0.75	0.98	0.88	E	1
28303	Steel Production - Basic Oxygen Furnace	0.85	0.75	0.98	0.88	E	1
28304	Steel Electric Arc Furnace	0.85	0.75	0.98	0.88	E	1
28401	Ferromanganese Furnace	0.00	1.00	1.00	1.00	C	1
28601	Steel Foundry - Steel Heat Treating (Salt Quench)	0.85	0.75	0.98	0.88	E	1
29101	Al Processing	0.00	0.00	0.00	0.00	D	1
29102	Al Reduction Potline	0.00	0.00	0.00	0.00	D	1

TABLE F-1. REACTIVITY FRACTIONS (Continued)

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
29202	Primary Cu Smelter	0.50	0.50	0.50	0.50	E	*
29203	Cu Oxide Kiln	0.50	0.50	0.50	0.50	E	*
29301	Primary Pb Smelting - Slag Pouring	0.50	0.50	0.50	0.50	E	*
29302	Primary Pb Smelting - Blast Furnace	0.50	0.50	0.50	0.50	E	*
29303	Primary Pb Smelting - Zn Fuming	0.50	0.50	0.50	0.50	E	*
29304	Primary Pb Smelting - Sintering	0.50	0.50	0.50	0.50	E	*
29305	Primary Pb Smelting - Blast Furnace Upset	0.50	0.50	0.50	0.50	E	*
29306	Primary Pb Smelting - Zn Baghouse	0.50	0.50	0.50	0.50	E	*
29307	Primary Pb Smelting - Dross Reverb. Furnace	0.50	0.50	0.50	0.50	E	*
29309	Primary Pb Smelting - Sinter Production	0.50	0.50	0.50	0.50	E	*
29330	Primary Pb Smelting - Zn Process Composite	0.50	0.50	0.50	0.50	E	*
31101	Light-Duty Vehicles - Leaded	0.00	0.00	0.00	0.00	E	1
31102	Heavy-Duty Vehicles - Leaded	0.00	0.00	0.00	0.00	E	1
31201	Light-Duty Vehicles - Unleaded	0.00	0.00	0.00	0.00	E	1
31230	Light-Duty Vehicles Composite	0.00	0.00	0.00	0.00	E	1
32101	Light-Duty Vehicles - Diesel	0.00	0.00	0.00	0.00	E	1
32202	Heavy-Duty Diesel	0.00	0.00	0.00	0.00	E	1
33001	Leaded/Unleaded Gas Composite - 1977	0.00	0.00	0.00	0.00	E	1
33002	Transportation Composite - Medford, OR (1980)	0.00	0.00	0.00	0.00	E	1
33003	Transportation Composite - Portland, OR (1979)	0.00	0.00	0.00	0.00	E	1
33020	Transportation Composite	0.00	0.00	0.00	0.00	E	1

TABLE F-1. REACTIVITY FRACTIONS (Continued)

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
34001	Jet Aircraft	0.00	0.00	0.00	0.00	E	1
34002	Tire Wear	0.50	0.50	0.50	0.50	E	*
41101	Paved Road Dust - Missoula, MT	0.00	0.50	0.00	0.50	D	1
41102	Paved Road Dust - Juneau, AK	0.00	0.50	0.00	0.50	D	1
41103	Paved Road Dust - Lewiston, ID	0.00	0.50	0.00	0.50	D	1
41104	Paved Road Dust - Butte, MT	0.00	0.50	0.00	0.50	D	1
41105	Paved Road Dust - East Helena, MT	0.00	0.50	0.00	0.50	D	1
41106	Paved Road Dust - Medford, OR	0.00	0.50	0.00	0.50	D	1
41107	Paved Road Dust - Portland, OR	0.00	0.50	0.00	0.50	D	1
41109	Paved Road Dust - Alabama	0.00	0.50	0.00	0.50	D	1
41110	Paved Road Dust - Spokane, WA	0.00	0.50	0.00	0.50	D	1
41130	Paved Road Dust Composite	0.00	0.50	0.00	0.50	D	1
41201	Unpaved Road Dust - Clopper Mine	0.00	0.50	0.00	0.50	D	1
41203	Unpaved Road Dust - Haul Road	0.00	0.50	0.00	0.50	D	1
41204	Unpaved Road Dust - East Helena, MT	0.00	0.50	0.00	0.50	D	1
41220	Unpaved Road Dust Composite	0.00	0.50	0.00	0.50	D	1
41301	Soil Dust - Des Moines, IA	0.00	0.50	0.00	0.50	D	1
41302	Soil Dust - Seattle, WA	0.00	0.50	0.00	0.50	D	1
41303	Soil Dust - Visalia, CA	0.00	0.50	0.00	0.50	D	1
41304	Soil Dust - South Bend, IN	0.00	0.50	0.00	0.50	D	1
41305	Soil Dust - Houston, TX	0.00	0.50	0.00	0.50	D	1
41306	Soil Dust - East Helena, MT	0.00	0.50	0.00	0.50	D	1
41307	Soil Dust - Idaho	0.00	0.50	0.00	0.50	D	1

TABLE F-1. REACTIVITY FRACTIONS (Continued)

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
41308	Soil Dust - Creston, IA	0.00	0.50	0.00	0.50	D	1
41309	Soil Dust - Council Bluffs, IA	0.00	0.50	0.00	0.50	D	1
41310	Soil Dust - Sioux City, IA	0.00	0.50	0.00	0.50	D	1
41311	Soil Dust - Cedar Rapids, IA	0.00	0.50	0.00	0.50	D	1
41312	Soil Dust - Davenport, IA	0.00	0.50	0.00	0.50	D	1
41313	Soil Dust - Spokane, WA	0.00	0.50	0.00	0.50	D	1
41314	Soil Dust - Boise, ID	0.00	0.50	0.00	0.50	D	1
41315	Soil Dust - Bakersfield, CA	0.00	0.50	0.00	0.50	D	1
41316	Soil Dust - Pasedena, CA	0.00	0.50	0.00	0.50	D	1
41318	Soil Dust - Medford, OR	0.00	0.50	0.00	0.50	D	1
41319	Soil Dust - Portland, OR	0.00	0.50	0.00	0.50	D	1
41320	Soil Dust - Alabama	0.00	0.50	0.00	0.50	D	1
41350	Soil Dust Composite	0.00	0.50	0.00	0.50	D	1
41401	Road Sand and Salt Mix	0.00	0.00	0.00	0.00	C	(nonreactive materials)
42101	Woodstoves - Pine Fuel	0.75	0.75	0.75	0.75	E	1
42102	Woodstoves - All Fuels	0.75	0.75	0.75	0.75	E	1
42103	Woodstoves - Oak Fuel	0.75	0.75	0.75	0.75	E	1
42201	Fireplaces - Softwoods	0.75	0.75	0.75	0.75	E	1
42202	Fireplaces - Hardwoods	0.75	0.75	0.75	0.75	E	1
42301	Slash Burning	0.75	0.75	0.75	0.00	E	1
42302	Slash Burning	0.75	0.75	0.75	0.00	E	1
42303	Residential Wood Combustion - Composite	0.75	0.75	0.75	0.75	E	1

TABLE F-1. REACTIVITY FRACTIONS (Continued)

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
42304	Agricultural Field Burning	0.75	0.75	0.75	0.00	E	1
42320	Agricultural Field Burning Composite	0.75	0.75	0.75	0.00	E	1
42330	Residential Wood Combustion Composite	0.75	0.75	0.75	0.75	E	1
43101	Marine Aerosol	0.00	0.04	0.00	0.04	D	2, 3
43201	Residential Space Heating - Coal	1.00	0.51	1.00	1.00	C	1
43301	Volcanic Ash	0.00	0.00	0.00	0.00	E	(minerals present are nonreactive)
43302	Orchard Heating Smudge Pots	1.00	0.51	1.00	1.00	C	1
43303	Coal-Fired Power Plant Flyash	1.00	0.51	1.00	1.00	C	1
90001	Solid Waste - Average	0.50	0.50	0.50	0.50	E	*
90002	Chemical Manufacturing - Average	0.50	0.50	0.50	0.50	E	*
90003	Food and Agriculture - Average	0.50	0.50	0.50	0.50	E	*
90004	Steel Production - Average	0.50	0.50	0.50	0.50	E	*
90005	Lead Smelters - Average	0.50	0.50	0.50	0.50	E	*
90006	Metal Mining - General Processes - Average	0.50	0.50	0.50	0.50	E	*
90007	Primary Metal Production - Average	0.50	0.50	0.50	0.50	E	*
90008	Secondary Metal Production - Average	0.50	0.50	0.50	0.50	E	*
90009	Secondary Aluminum - Average	0.50	0.50	0.50	0.50	E	*
90010	Gray Iron Foundries - Average	0.50	0.50	0.50	0.50	E	*
90011	Steel Foundry - General	0.50	0.50	0.50	0.50	E	*
90012	Clay and Fly Ash Sintering - Average	0.50	0.50	0.50	0.50	E	*
90013	Mineral Products - Average	0.50	0.50	0.50	0.50	E	*

TABLE F-1. REACTIVITY FRACTIONS (Continued)

Profile Number	Name	K	Ca	Na	Mg	Data Quality	Reference
90014	Petroleum Industry - Average	0.50	0.50	0.50	0.50	E	*
90015	Pulp and Paper Industry	0.50	0.50	0.50	0.50	E	*
90016	Industrial Manufacturing - Average	0.50	0.50	0.50	0.50	E	*

*No data; default value of 0.50 assigned.

In another instance, the ferroalloy and the iron/steel industry would likely have reactivity values near 1.00. Based on Reference 5, this is due to the high temperatures which would probably produce oxides as the only species. The Canadian values for ferroalloy manufacture are 1.00 for Ca, Mg, and Na, and 0.00 for K. The Canadian iron and steel industry values are 0.75, 0.88, 0.98, and 0.84 for Ca, Mg, Na, and K, respectively. These values agree well with the estimates developed in this report.

APPENDIX F REFERENCES

1. Meteorological Environmental Planning Limited and Ontario Research Foundation, "Anthropogenic Sources and Emissions of Alkaline Particulate Matter in Canada," Ontario, 1984.

2. Taback, H. J., A. R. Brienza, J. Mackco, and N. Brunetz, "Fine Particle Emissions from Stationary and Miscellaneous Sources in the South Coast Air Basin (Appendix)," KVB, Inc., Houston, TX, 1979.

3. Tucker, M. E., "Sedimentary Petrology," John Wiley and Sons, New York, 1981, pp. 159-160.

4. Panshin, A. J. and C. deZeeuw, "Textbook of Wood Technology," McGraw-Hill, Volume 1, pp. 72-75.

5. Hurlbut, C. S. and C. Klein, "Manual of Mineralogy," John Wiley and Sons, 1977.

APPENDIX G
DATA FILE DESCRIPTION

The PM Speciation Data Base consists of nine working files. The content of each file is as follows:

File	Content
PROFILE	Profile number CAS number Species number Species name Weight percentages by size interval
GENERAL	Profile name Profile number Profile data quality Control device Data source Reference SCC
UNCERTAINTY	Profile number Species number Uncertainty values by size interval
STATUS FLAG	Profile number Species number Status flags for weight percentage and uncertainty fields
MASS FRACTION	Profile number Mass fraction data for size intervals 0-2.5 um, 0-6 um, and 0-10 um
REACTIVITY FRACTION	Profile number Reactivity fraction data for K, Ca, Na, and Mg
SCC	SCC Profile number Quality indicator
AREA SOURCE	Area source code Profile number Quality indicator
CONTROL DEVICE	Profile number Control device code based on AEROS Manual of Codes (Volume V)